

June 1958

# SCHOOL MANAGEMENT

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How to control a **BUS**  
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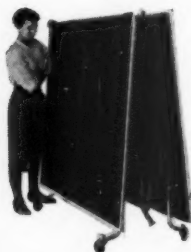
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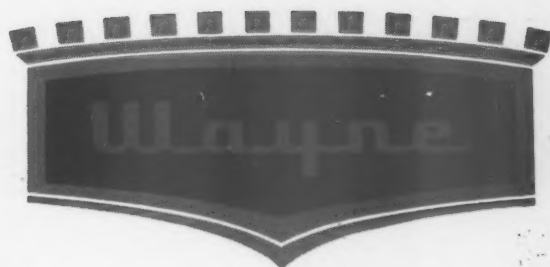
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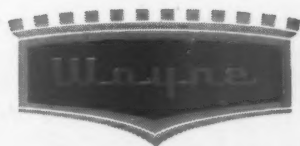
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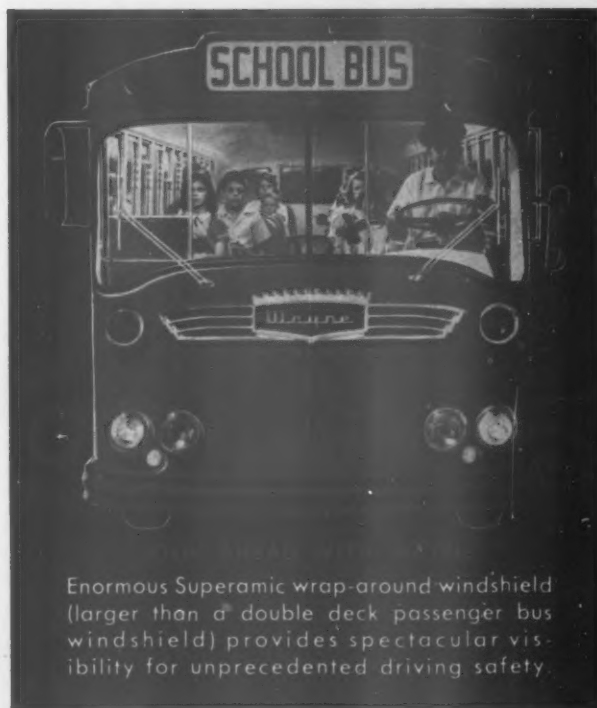


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SCHOOL MANAGEMENT

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# *We have been asked 2 questions about subscriptions to* **SCHOOL MANAGEMENT**

## *Question #1*

"... If possible, will you please add my name to the complimentary subscription list for SCHOOL MANAGEMENT? I would like to receive it regularly."

### **ANSWER**

We estimate that there are more than a million people in the U. S. with an abiding and deep interest in their schools. They include members of citizens' committees, principals, teachers, and college professors—as well as elected officials and professional administrators. SCHOOL MANAGEMENT is expressly edited to satisfy their mutual interest in public education. But—obviously—we cannot afford to provide all of them with complimentary subscriptions. Instead, we have carefully selected some key men in every sizeable school district in the U. S. to receive the magazine gratis. For the most part, they are superintendents, school board presidents, and school business managers. We will accept your individual one-year subscriptions, however, at the rate of \$8.00 for 12 issues, and you may obtain discount for group orders. See Question #2 for details.

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22 West Putnam Ave., Greenwich, Conn.

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**President**  
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### A question of statistics

SIR: Edward Moyer's "statistical" analysis of John's chance to be admitted to Amherst (*SM*, April, 1958) is as inept an application of statistics as I have seen from a person of his training. It is even more incredulous that a journal specializing in "Practical Solutions to School Management Problems" should have this slip by its editorial staff.

Off hand, I would think that the example chosen would stand an 80 or 90% chance of admission rather than the 2% chance which Mr. Moyer suggests.

With reference to the basic information given on page 13 about getting into college, you should also point out that outside of the New England area there were many places in last year's freshman class which went unfilled. Thus there are educational opportunities going begging for those students who are willing to consider good colleges which are not necessarily located in the Northeast.

As a member of the superintending school committee of the Town of Brunswick, I cannot disagree with your desire to arm administrators and school boards to sell the case for the schools to the taxpayers. However, this information should be carefully screened for accuracy and also to be sure that it gives proper perspective. The situation is so confused, at best, that distortions will only hinder in the long run.

JAMES S. COLES  
PRESIDENT  
BOWDOIN COLLEGE  
BRUNSWICK, ME.

### Prefers guidance to statistics

SIR: I read with interest Edward Moyer's comments on college guidance. Mr. Moyer has done an outstanding job in college counseling and the reports he sends colleges on his students are as fine as any. His statistical study of the chances for a young man to gain admission to Amherst are not so good as Mr. Moyer's guidance. I am sure that he overemphasized the case in question for a good reason.

Actually in the year in question, Amherst accepted some 460 candidates out of 1400 to get a class of 253. About 120 were selected from New York to get the 63 who came.

It might interest your readers to

know that I am serving on a committee of the Association of College Admission Counselors which will establish this summer in Chicago a central admissions office to help students who fail to gain admission to an accredited college. This center should be in operation by June 1, and announcements will be made to the schools.

EUGENE S. WILSON  
DEAN OF ADMISSION  
AMHERST COLLEGE  
AMHERST, MASS.

■ As Dean Wilson's letter indicates, many applicants apply to several colleges as a hedge against refusal by the college of their first choice. Thus, while Dr. Moyer's figures are correct, they do not reflect that Amherst actually accepted 407 from whom only 253 accepted the opening offered them. ED.

### Panelists use magazine

SIR: I have watched with pleasure the growth in selectivity of subject matter and in depth of presentation which has characterized succeeding issues of *SCHOOL MANAGEMENT*.

It may interest you to know that several articles, notably "Profile of the new kind of superintendent," have served as resource material for panelists on a television series on public education, of which I am the associate producer. Our local Westinghouse station, KDKA-TV, is doing a 13-week series on the problems of public education in Pennsylvania, running through May. On several occasions, when they have asked for suggestions of things to read before appearing on a program, I have suggested your magazine.

I look forward to receiving your magazine each month and have carefully filed each issue for my own resource library.

MRS. JAMES M. DONAHOE  
EDUCATION EDITOR  
SOUTH HILLS RECORD  
PITTSBURGH, PA.

### Visual aid rooms

SIR: It is my understanding that in the article "What's right and what's wrong with present day schoolhouse design" (*SM*, March, 1958) you are reporting on objective research from a study of 325 elementary schools built in the 10 years following the end of

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World War II. Your suggestions and "musts for school builders" undoubtedly are based on this study. We heartily endorse your recommendations to: "use care in 'combination' rooms" and "plan for communications."

We must however protest any implication that visual aid rooms should be constructed. Regardless of the actual construction practice in the 325 schools of your study, I can assure you that you would find little, if any, support for the construction of visual aid rooms from the audio-visual specialists. We recommend that each classroom be provided with light control facilities. If such installations are considered in the early stages of classroom planning, it is *much more economical* to include them in each of 30 classrooms than it is to construct a single room to be shared by the 30 teachers. It is far better to project in the classroom than it is to disturb students by trooping them to a special room scheduled weeks in advance by the teachers.

J. ROY BARRON  
PRESIDENT  
AUDIO VISUAL EDUCATION  
ASSOCIATION OF CALIFORNIA

■ *The following reply to Mr. Barron was prepared by Dr. Paul Phillips, author of the article in question.* ED.

"I believe you are specifically referring to section four, page, 40 of the magazine which clarifies what is meant by a special room and which refers to a multi-purpose room. If any implication is derived from this grouping that visual aid rooms should be constructed it was not intended.

"The findings of this study reveal that where special rooms are constructed, specifically an auditorium or multi-purpose room, they are used for visual aids projection.

"As a practicing educator I believe that visual aids should be shown in the classrooms for maximum teaching efficiency. I must admit that various difficulties do exist in many school buildings throughout the nation regarding projection techniques. The purpose of the study was to find out some of the difficulties and then do something about it. Organizations such as yours can do much to correct these shortcomings."

## Citizens' committees

SIR: Immediately I wish to express the enthusiastic support of the Mentor Exempted Village Board of Education for your publication. The articles have been consistently of great interest, worthwhile in information, and realistic in approach to achieving future goals.

Our board of education has always depended upon the advice and assistance of citizens' committees and it is in behalf of the current committee that I write asking for 25 additional copies of the April, 1958, issue of SCHOOL MANAGEMENT.

This issue contains information for all five of the citizens' planning advisory committees—finance, high school, junior high school, elementary schools, and three-year versus four-year high schools.

DONALD G. BROWN  
CLERK-TREASURER  
MENTOR PUBLIC SCHOOLS  
MENTOR, OHIO

■ *Many districts have taken out reduced-rate group subscriptions for citizens' committees and PTA board members. For details, see pages 4 and 5.* ED.

## TV information wanted

SIR: We certainly appreciate receiving your excellent and helpful magazine.

The article on closed circuit TV, (SM, March, 1958) brings to a head my wondering on this subject. Thinking only of elementary and secondary public schools, does closed circuit TV have a single advantage over films?

Sure, you can hear and see the best teacher in the area. With film, it would be the best in the nation. Films can be edited and certain parts re-filmed if weak. Other parts can be cut or added.

Would there be a long-range difference in price? If the films were national in scope, surely the production cost would be much less than live TV.

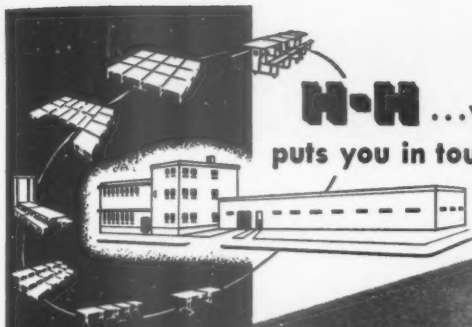
I have never seen this comparison. TV is always compared with live instructors in the classrooms. Don't we already have the facilities and training for the production and use of films in many schools?

This is not to pick a fight, but to pick up information. Can you or some of your readers supply it?

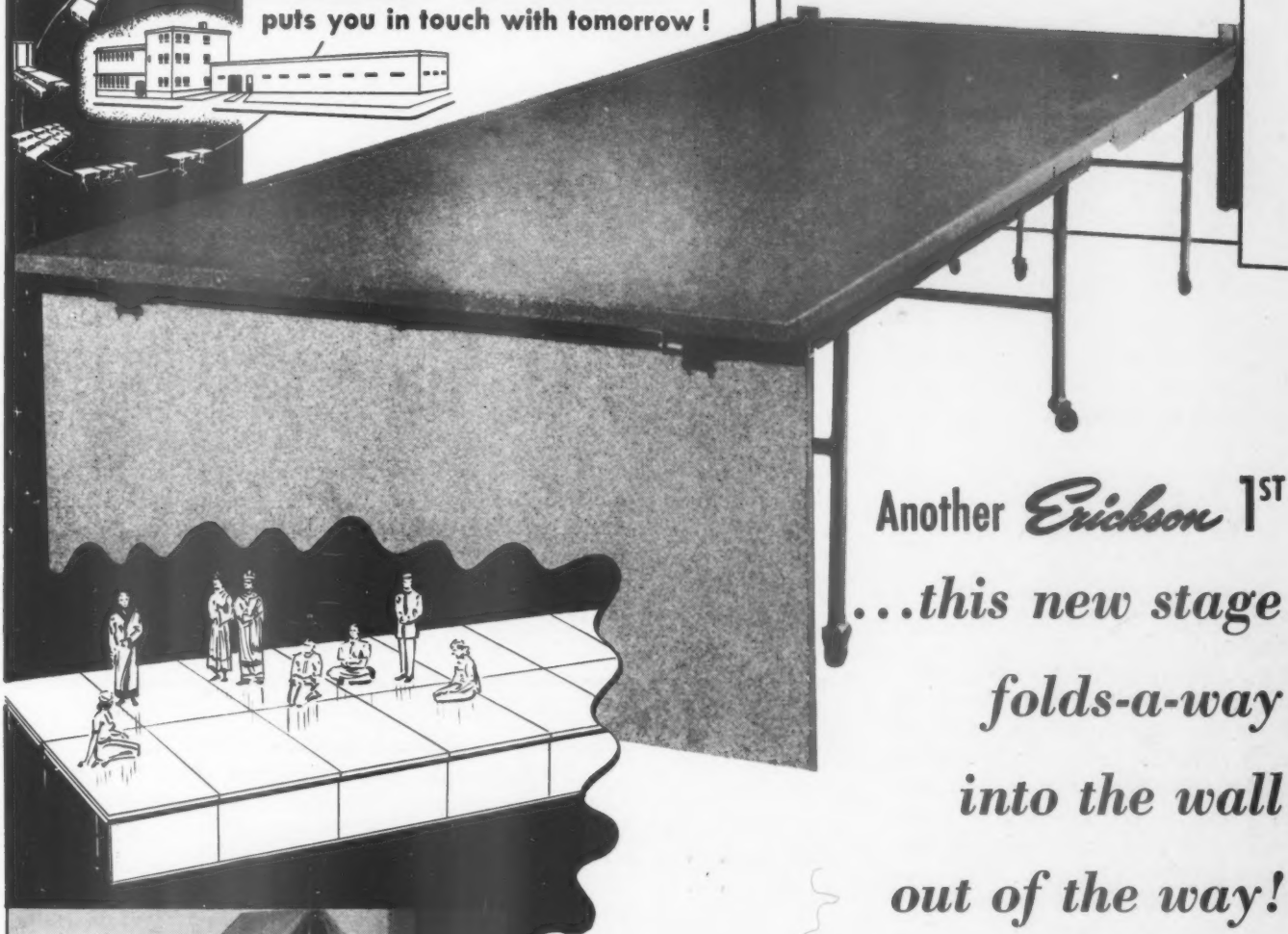
MYRON DENBROOK  
ARCHITECT  
GRAND FORKS, N. D.

■ *Reader Denbrook has an interesting point, one that has not been discussed too often. What do other readers think of his ideas? Have any schools made a comparative study of the costs of television as opposed to movies? If so, we'd like to hear about it.* ED.

SCHOOL MANAGEMENT endeavors to print as many letters as possible. Since we cannot print all, we try to make a selection representing all points of view. Send all Letters to the Editor to SCHOOL MANAGEMENT, 22 West Putnam Ave., Greenwich, Conn.



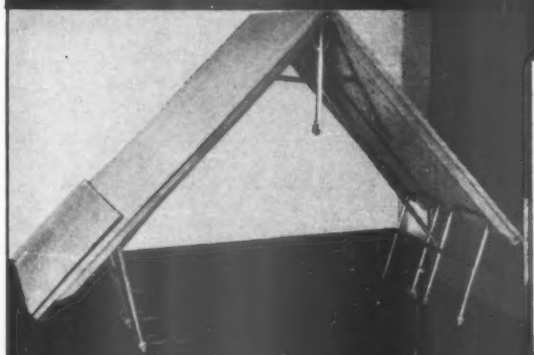
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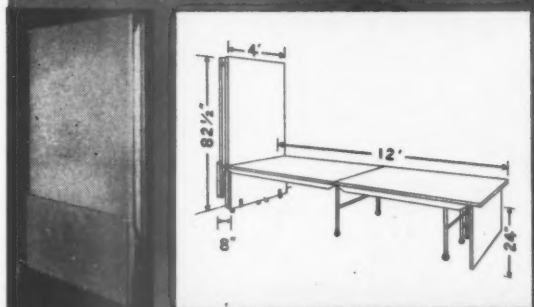
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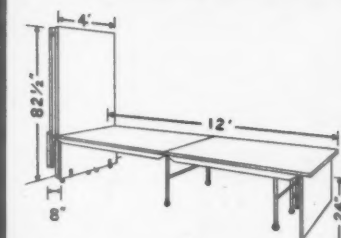
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(For more information, see last page)

# THINGS YOUR PUBLIC OUGHT TO KNOW

Basic information that schoolmen can use as a part of community education program

## U. S. schools outproducing Russia's

"The schools are in terrible shape. . . . The only thing US schools have plenty of is children." So says Life magazine in a series on US education.

Is this true?

"Our educational system has a remarkable record of producing relatively more engineers and scientists than any other country, including Russia," according to Robert J. Havighurst—a leading educational authority and Professor of Education at the University of Chicago. "While there are shortages in our educational system, this system nevertheless recruits and trains more scientists and engineers per thousand young people than any other country, and more than ever before in our own history."

In a chart (see right) prepared by Havighurst, the following is apparent: We are producing about 43,000 engineers, physical scientists and mathematicians a year. This is our highest rate of production except for the years immediately after World War II. We are producing more scientists and engineers, relative to our youth population, than Russia. The Russians exceed us in gross numbers because they have nearly twice as many young people as we do.

We are still short of scientists, but this doesn't mean that the US answer lies in panicky imitation of the Russian educational system. They are short of scientists, too.

"The job of American educators," Havighurst states, "is to find able young people who do not now go to college or do not finish college, to get them into and through

college, and to get a reasonable fraction of them to go into science careers." That's what Russia is doing.

Obviously, this means more and better guidance at the junior and senior high school levels. The generally accepted ratio is one trained guidance counselor to every 250 students at the secondary level.

Havighurst concludes, "With a

skillful use of motivating procedures and of financial assistance, I believe we could increase the number of college entrants among the top quarter in ability by about 10%, and we could increase the number of college graduates in the top quarter of ability by about 20%, all during the next four years, when the need for trained youth will be as great as it is now."

End

University Graduates Relative to Population, Aged 22

Year	U. S. A.			U. S. S. R.		
	No. of 22-yr. olds (1000's)	Univ. Grads. per 1000 22-yr. olds	Grad. Engrs. & Scient. per 1000 22-yr. olds	No. of 22-yr. olds (1000's)	Univ. grads. per 1000 22-yr. olds	Grad. Engrs. & Scient. per 1000 22-yr. olds
1928-30 (Aver.)	2,000	58	11	2,900	12	4
1940	2,400	77	13	3,200	32	11
1946-50 (Aver.)	2,400	118	26	4,000	33	11
1954	2,150	135	20	3,800	46	17
1960	2,300			4,400		
1965	2,900			3,700		
1970	3,600			4,200		
1975	3,900			4,800		



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(For more information, see last page)



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## A guide to useful information

## CONSTRUCTION

**Practical ideas.** If your district is planning any construction, you may get some valuable ideas from this collection of 30 schools designed by Warren H. Ashley, well-known New England schoolhouse architect. It details his ideas on proper sites, future expansion and over-all school planning. The booklet is profusely illustrated and shows many floor plans.

**SUCCESSFUL SCHOOL PLANNING.** Warren H. Ashley, Architect, 740 Main St., West Hartford, Conn. Free.

## TELEVISION

**Mainly Pro.** An authoritative report on the educational possibilities of television by Charles A. Siepman, chairman of the department of communications in education at New York University. Mr. Siepman examines all aspects of educational TV in relation to the shortage of teachers. He reports in detail on the results of two statewide educational TV systems, 12 city systems, and the Canadian system. He deals at length with the objections raised in many quarters to educational TV. The author points out that, properly used, TV can be a rewarding experience for teacher and student alike. Mr. Siepman has done educators a tremendous service by gathering all the facts about educational TV and presenting them in a well-documented yet readable book. The school administrator, troubled by the lack of qualified teachers, would do well to read this informative book.

**TV AND OUR SCHOOL CRISIS.** By Charles A. Siepman. Published by Dodd, Mead & Co., 432 Fourth Avenue, N. Y. \$3.50

## ADMINISTRATION

**Adequate facilities.** Increasing enrollments and enrichment of the school program are making added demands on the administrative staff and physical facilities. This book will assist planners in providing functional facilities to meet these administration needs. It emphasizes the importance of analyzing administrative activities when planning various elements of the school plant.

Written by James L. Taylor, specialist in planning school buildings, it

presents requirements, characteristics, arrangements and actual floor plan layouts for facilities. It treats in detail all areas from the principal's office down to storage rooms in both elementary and secondary schools.

**ADMINISTRATION FACILITIES IN SCHOOL BUILDINGS.** Bulletin No. 6, US Dept. of Health, Education and Welfare. Order from Supt. of Documents, Government Printing office, Washington 25, D. C. 45¢

## VOCATIONAL

**Farm mechanics.** Increased farm mechanization has accented the need for this phase of instruction in vocational agriculture departments. This 63-page illustrated book is a practical guide for developing training programs in the physical and mechanical aspects of farming. The text was prepared by A. H. Hollenberg, specialist in agricultural education.

Sections are devoted to soil and water management, electrification, equipment and machinery, building maintenance and improvement programs, and farm shop work. Instruction data and procedures, discussion topics, demonstrations and assignments are given for each field.

**INSTRUCTION IN FARM MECHANICS.** Bulletin 267 No. 70 US Dept. of Health, Education and Welfare. Order from Supt. of Documents, Government Printing Office, Washington 25, D. C. 35¢

## FILMS

**Government listing.** A revised directory of movies and filmstrips available from the Federal government contains 550 current titles.

Besides summary of content, data on each includes length and type of film, loan and purchase sources and TV clearance. In addition to alphabetical title section, the book is cross indexed by specific subject for ease in locating films of interest. Also indicated are 227 titles previously available but now withdrawn from circulation.

**US GOVERNMENT FILMS FOR EDUCATIONAL USE.** Supplement to Bulletin No. 1, US Dept. of Health, Education and Welfare. Order from Supt. of Documents, Government Printing Office, Washington 25, D. C. 35¢

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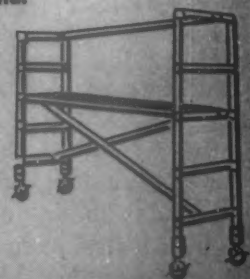
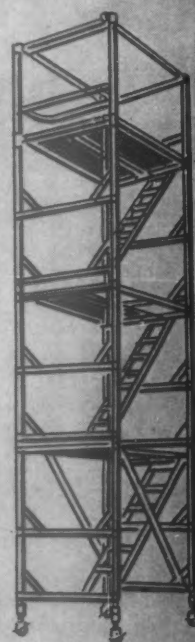
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X-frame, too. It's ready now... Yes, it wears the famous Clarín ten-year guarantee stamped in steel. For full details, ask your Clarín Distributor or write us direct for specifications.



(For more information, see last page)

# NEWS OF THE SCHOOLS

*A digest of current happenings in public education*

## Students clean up village of 5,000

Several hundred high school students from Pearl River, N. Y., banded together under the supervision of their principal and a faculty adviser and gave their town a virtual face-lifting. They renovated the downtown police booth, the American Legion Station Plaza and the school grounds itself. Then they completely set in order an almost abandoned cemetery of more than 200 graves.

The 5,000 residents of Pearl River were surprised and impressed at the project which was sponsored by the school's general organization. Paint for the police booth was donated and youngsters brought garden tools and other equipment from their homes. School officials, after viewing the school grounds, said the boys and girls did a better job "than 10 men working all week."

## Ninth grade classes to ease high school crowding

Serious crowding in four Detroit, Mich., high schools will be relieved somewhat next fall by addition of ninth grade classes in eight elementary schools.

The board of education took this action after discovering that some 1,200 students will be entering high school in the fall without adequate room. Another 600 students will enter high school in mid-term. The board estimated that to build facilities for the student increase would cost about \$2.5 million.

## Campus plan school curtails horseplay

Add this to the arsenal of arguments in favor of campus-style high schools. A school official in Thiensville, Wis., claims they will "cut down

the horseplay" of high school pupils and "keep them awake" for the next class.

The argument rests on the theory that students will be awakened and refreshed by brisk, invigorating walks going from one classroom to another between periods in a sprawling campus-type school.

Thiensville's school board has proposed building a new campus-style high school rather than a conventional single building. The matter goes to the voters later this year.

## New alarm system stops school vandals

A \$10,000 unique electronic alarm system installed by the Hackensack, N. J., schools has virtually eliminated vandalism which has cost the schools as much as \$50,000 in a year.

The alarm system, developed by the Bogen Co., manufacturer of "hi-fi"

equipment, consists of supersensitive microphones planted throughout the schools and connected to an alarm device in police headquarters. The system is turned on whenever the schools are not in use. If the level of noise in the empty school rises an alarm is automatically tripped and police rush to investigate.

The system was widely publicized when it was installed and since then no attempts have been made to even enter the schools after they are closed.

School board members voted to buy the equipment after vandals set fire to a school last year. The blaze destroyed the auditorium stage and most of the school's musical instruments.

For more information, circle number 778 on the Reader Service Card.

## Educational TV shows on increase in schools

Use of educational television programs in the public school curriculum

## Too good to miss . . .

**Boston . . .** Massachusetts teachers are now entitled to a minimum 30-minute lunch period, for the first time in the state's 323-year history of public education. This is the result of a new state law signed recently by Governor Foster Furcolo.

**Detroit . . .** Teachers and principals here have protested against a plan of Superintendent Samuel Brownell to allow outsiders to compete for jobs as principals and assistant principals in the Detroit schools. The principals claim the plan will result in poor morale and "would definitely be detrimental to the system."

**Des Moines, Iowa . . .** This state will have 300 fewer school districts on July 1 than it had a year ago. A report of the state department of public instruction shows that 333 present districts will be replaced by 32 new and larger ones. The state will still have more than 3,000 school districts.

**Clifton, N. J. . . .** The board of education here hopes to be able to construct a new \$6.5 million high school on property now partially owned by the Federal government. A bill recently introduced in Congress would allow the city to take over seven acres of the United States Animal Quarantine Station here. Two years ago a similar bill was passed giving the board 14½ adjacent acres for school building.

is steadily gaining in the Northeast. Some 49 eastern Massachusetts schools have adopted it, with 21,000 elementary pupils viewing selected offerings of WGBH-TV, the station sponsored by Boston's colleges and universities.

In Albany, the New York State Board of Regents has organized two committees to direct TV programs scheduled to start in New York City schools next fall. The broadcasts will be paid for by \$600,000 appropriated by the state legislature.

In West Hartford, Conn., elementary school students are now looking at a weekly series of shows telling the

story of industry in the state. The programs, broadcast by WNBC, a commercial station, are being paid for by the Hartford Society for Savings, a savings bank.

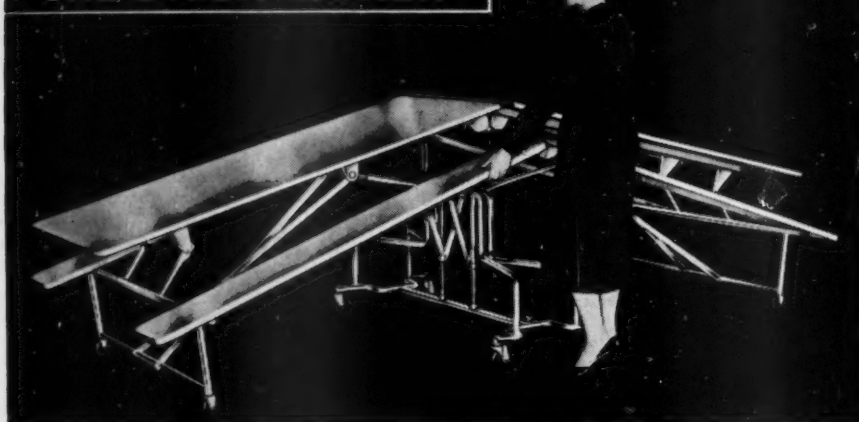
### School forced to end kindergarten program

Kindergarten for four-year-olds, a program operated by the Portland, Me., schools for the past 75 years, will be shut down next September. The

school board took this action, after months of study and debate, to save money. It estimated the decision, freeing some 15 classrooms for other grades, will save the city about \$140,000 in new construction costs plus another \$84,000 in teacher salaries. The school program will now begin, as in most communities, with five-year-olds entering normal kindergarten. The special kindergarten was not required and many parents, the board said, did not enroll their youngsters in it.

## NEW HOWMATIC "12" BENCH AND TABLE

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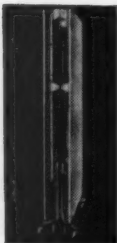
## OPENS IN 3 SECONDS! FOLDS IN 3 SECONDS!

The new HOWMATIC "12" bench and table opens or folds in one, easy, automatic action! Opened, a foolproof safety lock grips this 12 foot unit automatically. Folded, it remains securely locked, the release bar at adult height.

Even in close quarters, the HOWMATIC is compact and maneuverable: Folded, the HOWMATIC's four, large swivel casters make the unit easy to move in all directions. Opened, four fixed casters on bench legs secure the unit firmly.

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The new, 12 ft., benchless HOWMATIC "T". Unique Floating Action makes opening or closing this unit almost effortless... The center, castored legs touch the floor at all times; the four corner legs touch the ground only when the unit is fully opened... They anchor the HOWMATIC in place. This eliminates opening and closing drag, makes the HOWMATIC "T" almost effortless to operate.



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(For more information, see last page)

### Magazine contributor wins high award

Wilma Morrison, education editor of the *Portland Oregonian*, and a frequent contributor to *SCHOOL MANAGEMENT* was the recipient of a citation from the Education Writers Association for a series of articles she did for her paper on school construction costs. The articles, which were reprinted here under the title "How Portland handled the Reader's Digest attack," (*SM*, Feb. 1958), was cited for interpreting to her state and the nation many factors to be considered in school building programs.

### PTA urged to work more on education

Michigan Parent-Teacher Assn. delegates attending the state convention at Muskegon were invited to abandon their preoccupation with cake sales and square dances in favor of the real problems of education.

School officials who addressed the 4,000 delegates urged them to tackle such problems as curriculum changes, school administrative policy (even though PTA charter forbids it), gifted children, report card systems.

Outside the school, the delegates were told, the PTA should work for improvement of child welfare laws and set up study groups on problems in family living.

### School board sues over pension fund error

The Clifton, N. J., board of education has filed suit to determine whether

er it is responsible for some \$14,000 in pension funds it failed to deduct from a teacher's salary over a period of 37 years. The teacher retired recently and applied for her pension. The state teachers pension and annuity fund said nothing had ever been paid into it and demanded the school board make up the \$14,000 deficit. The board discovered that an error had been made when the teacher was hired in 1921 and had simply been innocently perpetuated.

## High school driving course aided by TV

Columbus, Ohio, high schools have launched a new driver training program with the aid of educational television station WOSU-TV and the Columbus Auto Club which is paying the \$4,500 cost of the broadcasts.

The driver course, which is conducted after school hours in the city's eight high schools, runs for a total of 40 hours, plus behind-the-wheel training during the summer, and offers one-half credit toward graduation. The TV lessons will take up 16 of the 40 hours, with the remainder given over to other classroom instruction. The course is open to any student over 16.

Columbus doesn't expect to save any money with the TV innovation, but officials think that if the program is successful it may lead to eventual reduction in instruction costs.

## Financial aid for school papers urged

School newspapers provide a valuable link between the home and the school, are a powerful public relations device and should be supported financially by the school board, if necessary. These conclusions were reached by high school newspaper editors, reporters and faculty advisors attending the Nassau Scholastic Press Assn. conference in Great Neck, N. Y.

Jack London, faculty adviser at New Hyde Park pointed out "If the football teams and band and other extra-curricular activities can get financial support from the school administration, it seems even more logical that the newspapers, which do a real service to the whole school, should be supported."

Some school papers disclosed they

were in serious financial trouble because of rising printing costs and the difficulty in obtaining sufficient advertising revenue to pay for it.

## Detroit to try out teacher aide program

A program of assistant teachers will be tried in Detroit's high schools next year in answer to charges that students don't learn to write.

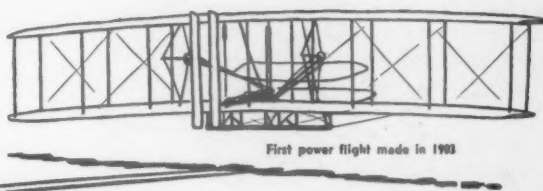
Schools Superintendent Samuel Brownell, who announced the plan,

said assistants would be recruited from ranks of certified teachers who have retired or quit and would be assigned to any regular high school teacher requesting assistance.

Sole duties of the assistant, who would work on a part-time basis, would be criticism and instruction in English composition.

The proposal has not met with unanimous approval. Although the Detroit Education Assn. favors it, the Detroit Federation of Teachers termed it "just another short-cut," charged that the real solution was smaller classes and fewer duties for teachers.

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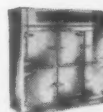
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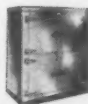
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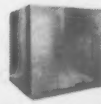
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# So you're going to hire an architect

**In this candid interview, a nationally-known schoolhouse architect answers some ticklish questions about fees, building economies, and what to look for when you retain a firm.**



*Charles Colbert of New Orleans has had unusually varied architectural experience. He has designed and planned schools, motels, stores, office buildings and a huge shopping center. He is a city planner and has served as supervising architect and director of planning and construction for the New Orleans Parish school board. He has taught architecture at Tulane University and served as director of the division of architecture at Texas A&M.*

■ ■ ■ This article will NOT tell you how to hire an architect. Instead, it explores the touchy areas that schoolmen and architects often are reluctant to discuss between themselves on a face-to-face basis.

When we decided to write this story, the editors felt that it could best be accomplished in a no-holds-barred interview with an architect who enjoyed the respect of other men in the profession . . . an "architect's architect". We discussed the problem with several men—consultants, architects and schoolmen. Charles Colbert, of New Orleans, was mentioned frequently, and in those cases where he was not mentioned, he was found to be known and admired. The tape-recorded interview that follows was conducted in his office early this year. Ed.

**Q** *Mr. Colbert, let's say you were called in, for an interview, by a school district that you had never done work for before. Suppose the board members said, "We've seen a couple of schools you built. They look good to us. But we're interested in some other architects, too. What can you tell us about yourself?" Would you be insulted or offended by that kind of approach?*

COLBERT: No. Why should I be? You've got to start somewhere, and it would be just as important to me as it would to the school board that we learn something about one another.

**Q:** What if they said, "We've got an economy problem, here. We want to build a school for 700 or 800 kids, and we don't want to spend more than \$500,000. Can you do it?"

COLBERT: If I had a simple answer for such a question, I would probably be doing a lot more school-house architecture than I am. I'd probably tell them, as straightforwardly as I knew how, that I couldn't answer their question until I knew more about their requirements. We don't try to do architecture by number of classrooms on a gross budget basis. I'd probably tell them their budget *seemed* to be adequate. But I would want to find out their real needs—and the needs of the community at large. I'd ask for the op-

portunity to research the project in the light of architectural need. If they wished to have other architects do the same thing, that would be all right with me.

**Q:** Suppose they said, "That comes later. We're going through an elimination process now. We want to get your ideas about economy before you go to a lot of work and we get involved in an obligation." What would you say?

COLBERT: I haven't ever solved this problem personally. I suppose I would tell them that we can strip off the non-essentials, as can any architect. That we can lower the ceiling heights—that we can build as close to the building code as anyone else . . . That we have the confidence of good contractors, and that they can buy materials as cheaply as anyone else. I can give them all this kind of mish-mash. But that's all it is. Insofar as telling them anything factual, they might do better to look at our record.

**Q** *Do you think that would get you the job?*

COLBERT: Look, I'm just as interested in buying groceries for my children as any other architect. But, at this stage of the game, if a school board wanted me to prove that I knew whether a Crane plumbing fixture was cheaper than a Briggs plumbing fixture—or whether I knew the difference between a 20-year bonded roof and a 10-year guaranteed roof—or whether I liked yellow faced brick instead of brick and wood—I don't

think I would be too interested in getting the job.

**Q:** Let's talk about fees for a moment. Suppose this hypothetical school board asked you whether you would cut your fee below the standard 6%?

COLBERT: There is nothing standard about the 6% fee. At 6% an architect can be grossly overpaid or underpaid. I'm not going to stand on a soap-box and wave the flag for the great profession of architecture. But I don't believe that good architects work on the basis of the profit motive alone. I could charge you 20% of the cost of construction, and earn every penny of it. You've got to make the decision as to how much you can afford for planning and good architectural design and how much value it has for you. Now, if you were serious about your question about my fee, and if I felt there was some security to the proposition, I'd tell you that I would take the job on a per diem basis, or on a basis of production cost plus a fixed profit, or on any reasonable arrangement wherein we could financially render an adequate service.

**Q** *Wouldn't you be in a potentially awkward position? Doesn't the American Institute of Architects insist on a minimum 6%?*

COLBERT: I see nothing wrong, or contrary to the mandatory rules of the AIA in saying that an architect can charge on a cost-plus basis, even with an "upset." If anybody intimates that I must charge a minimum, or a maximum, fee I'm going to be very upset. I'm not worried about minimums. I am worried about maximums. Nobody has ever overpaid us, nor are they ever likely to. So far as I am concerned, you can't overpay a confident, competent, interested architect.

**Q:** Then you don't believe in this generally-used 6% . . . ?

COLBERT: I'll stand on what I said



## How much is an architect worth?

*"An architect can be grossly overpaid or underpaid . . . I don't believe that good architects work on the basis of profit motive alone."*

Colbert

—at 6% expressed in advance, an architect is usually either undercharging or overcharging on that individual job. Look at it this way: most architects work backwards. First they work out what they think they want as an annual net profit. Then they work backward through each job to arrive at this net. The risk must be carried by one party or the other.

**Q** *Let's clarify this. Internally, you work on a cost-plus basis. You cost-account your work to assure a profit.*

COLBERT: Yes, and much of our work is *actually* done on a cost-plus basis. Remember, we are city planners as well as architects. We don't just specialize in schoolhouse architecture. Fixed fees are almost always an inequity to one party or the other. We keep the closest kind of cost-account records. We work within these cost figures at all times with a reasonable profit allowance. If we are designing a million-dollar building at 6%, our gross fee would

be \$60,000. By the time we had finished the preliminaries, we would have collected only \$15,000. Obviously, we are going to keep our man hours and costs within that figure for that portion of the work. If we reach it, we are going to stop or burn our feet trying. We might not want to, but it is a necessity. We have to make a profit and we can only do this through maintenance of budget procedures in the contract.

**Q:** Let me ask you this—would a school district find that it was saving money using a cost-plus basis?

COLBERT: It would save money, or should save money. Let me express it this way, *it costs money to save money*. Now most laymen seem to think that you save money by slicing off superficial things—these so-called "frills." Maybe you can save a little. The real place to start saving is on early concepts and in structural cost—but it costs the architect a lot of time and money to do this. For example, we checked records on 11 school buildings. We figured out that structural costs constituted 31% of the cost of the total buildings. Now, if you want to save

money, this is the proper place to start.

**Q:** What do you mean by the structure?

COLBERT: Only the skeleton. That would include foundation, columns, beams, and roof structure. You don't count most walls or the windows, etc.—they are considered architectural items. Back to the original point—it costs a lot of money to study the kind of structural changes that will save large sums of money. There is not enough cushion in a 6% fee, in most cases, to do this. As a result, many of our schools are structurally overbuilt.

**Q** *Let's try to give this a practical slant. Suppose you have designed a school for a district. You are satisfied with that school. Let's say it has been put out for bids and the bids come in too high. The school board says to cut back to the original estimate. Would you go to work on the structural costs first?*

COLBERT: I think it would depend upon how great a reduction was called for.

**Q:** Let's assume a \$3 million high school. Suppose it came in at \$300,000 over the base figure.

COLBERT: First of all, there is really no excuse for coming in with an overage like that. But, to answer the question, the usual procedure would be to cut out finishes. I believe this is wrong. You would then try to reduce both finishes and area. Unfortunately, you can't reduce area and cost in a straight line proportion. For example, if the building averages \$15 a square foot, you can't take out 2,000 square feet in order to save your \$300,000.

**Q:** Would you try to make your savings in the structure, then?

COLBERT: That would be pretty difficult, especially at that late date. The architect is not a structural en-

gineer . . . he is not an electrical engineer . . . he is not a mechanical engineer. He usually hires those other competencies. He pays them the going rate out of his fee. He can't afford to pay them more than the going rate, either. He can't ask them to go back to first principles of structural design and indulge in *real* analysis. He can't even ask them to do this originally, because real analysis takes time and costs money. The architect and the engineer have to be satisfied with "handbook analysis"—the old rules . . . or pay the extra costs themselves.

**Q:** Do you think most architects share your opinion?

**COLBERT:** This is a hard thing to express. I don't know if most architects would express it the same way, but I think any architect would agree in principle. It is more difficult to design an economical building than it is to design an expensive building. Architects are *told* to cut costs, but they aren't *paid* to cut costs. Ultimately, we should work out a formula whereby the less an adequate building costs, the more an architect is paid.

**Q** You said, a few moments ago, that schools are often structurally "over built". What do you mean?

**COLBERT:** I think we overbuild for safety. I'm not talking about the safety of the children. I'm talking about building something 10 times as strong as it needs to be. This is caused by antiquated building codes, obsolete handbooks, ridiculous cave man concepts in insurance and sticky public opinion. In this part of the country, it is partially because our schools are built as disaster centers. Maybe we do need disaster centers—but why should education support them?

**Q:** Who is at fault in overbuilding? Do school boards ask you to build this way?

**COLBERT:** Indirectly, they do because of the fixed commission or

*continued on page 52*

## The AIA's position on architect's fees.

facts

about  
ARCHITECTURE  
and  
ARCHITECTS



*Special Edition*

THE AMERICAN INSTITUTE OF ARCHITECTS

**Fees vary:** As in any other profession, fees for architectural services vary, and depend on an Architect's standing in his field, geographic location of office, size and kind of job to be done.

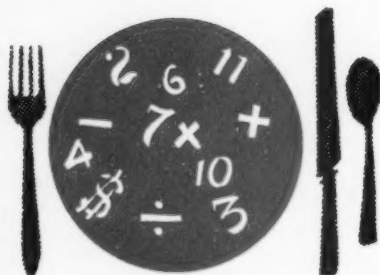
An Architect's fee often is less than the total of miscellaneous charges paid as part of the cost of a ready-made house; i.e., speculator's profit, commissions, financing charges and in some instances, taxes which may have accumulated before purchase. The Architect, in accord with his code of ethics, does not accept discounts or commissions; his only remuneration is that received from his client.

**Settled early:** The Architect's fee is settled at an early conference with final arrangements stated in a formal contract or by letter, countersigned by Owner and Architect.

The fee varies with individual cases—depending on amount of services required. The contract may provide for a consultation for architectural advice on buying and remodeling an old house or on the selection of a lot and complete architectural services to be rendered from beginning to end.

**Three principal methods:** There are three principal methods under which Architects ordinarily are compensated. Under the first, the Architect is paid a percentage of final cost of the work executed from his designs and is reimbursed certain expenses. Under the second he is paid a fee for his services and is reimbursed all his expenses. Under the third he receives a salary.

The excerpt above is taken from the booklet "facts about architecture and architects" published by the American Institute of Architects. Copies of this valuable booklet may be obtained free of charge by writing the AIA at 1735 New York Avenue, N.W., Washington 6, D. C.



# How to cost-account your cafeterias

A school accountant warns of the pitfalls of inadequate record-keeping on cafeteria accounts and shows the method his district uses to make sure its lunch program is solvent.

By JAMES E. COLEMAN,

*Accountant, Covina School District Covina, Calif.*

■ ■ ■ It is literally possible for a district's cafeterias to be insolvent for a considerable period without management's knowledge of such a condition unless current reports are used as a financial control point.

It is possible also for one or two faulty units to drag below the surface an otherwise profitable system. Management must have a control point which tells it where to look for trouble. The direction toward profit or loss currently being taken by the cafeteria operation must be constantly known.

These control points can be supplied by a relatively simple cost accounting system. The control points which arise out of this accounting system consist of three reports. They

are the profit and loss statement, the balance sheet, and the unit cost summary.

This proposed system need not be complex or costly, but it must be complete and current. It is designed to meet the needs of most school districts which serve on a plate lunch basis. In principle, the system is complete, though additional costing must be done if the cafeteria system is set up on an a la carte basis.

The three reports proposed here must be prepared monthly for the use of management. Each has a unique function, and when combined to make a whole, they tell the manager what he must know in regard to the various phases of his

operation. They are his tools.

## **General ledger data**

The data for preparing these reports is based on information taken from the general ledger. The profit items included in the general ledger are collected from the following sources:

**Sales volume.** As a sale is made, the cashier codes each entry on the cash register tape to indicate the type of meal served. The cash register tape and the money collected are forwarded to the accounting department at the end of each day. The number of lunches served is reconciled to the amount of money collected. The number of each type of sale is accumulated

until the end of the month, when a summary is made. This summary reflects volume and sales revenue. **Revenue from subsidies.** This is entered directly from the accounts receivable ledger onto the general ledger.

Expenses fall into two major categories: labor and food.

**Food cost data.** Food and supplies are purchased for the warehouse and are charged to an inventory account. Most items that are needed

by individual cafeterias are requisitioned from the warehouse inventory account. In the case of certain perishable items, individual units buy directly from vendors.

At the end of each month a summary is made of warehouse inventory requisitions. The warehouse inventory is reduced by the amount of the requisitions, and that amount is charged to the food expense card of each requisitioning cafeteria unit. Items purchased directly from ven-

dors are entered directly onto the food expense record of the purchasing unit.

**Labor cost data.** The time sheets covering labor are submitted to the accounting department from each cafeteria unit. These time sheets are totaled for the general ledger labor item. To this amount of labor is added labor performed by employees having districtwide responsibilities in connection with the cafeteria program. The charges for

# 1. WORKING PAPERS CAFETERIA ACCOUNT FOR MONTH OF SEPTEMBER 1957

Account No.	Account Title	Trial Balance		Adjustments		Profit & Loss		Balance Sheet	
		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
100	Cash in Bank	19,185.						19,185.	
102	Petty Cash	34.						34.	
110	Accounts Receivable	11,228.						11,228.	
120	Food Inventory	13,631.		3,572.				17,203.	
200	Accounts Payable*		22,707.						22,707.
210	Accrued Salaries		8,227.						8,227.
212	Withholding Tax		2,767.						2,767.
214	Blue Cross Insurance		226.						226.
216	Retirement Payable		949.						949.
220	Unredeemed Lunch Tickets		845.						845.
300	Sales		22,338.			22,338.			
310	State Subventions		6,644.			6,644.			
320	Discount Earned		64.			64.			
400	Labor*	10,142.				10,142.			
410	Food Barranca School	1,086.		249.		837.			
411	Food Ben Lomond School	1,134.		203.		931.			
412	Food Cortez School	1,377.		230.		1,147.			
413	Food Covina School	1,145.		311.		834.			
414	Food Cypress School	1,341.		259.		1,082.			
415	Food Eva D. Edwards School	1,622.		235.		1,387.			
416	Food Griswold School	1,193.		205.		988.			
417	Food Grovecenter School	1,130.		237.		893.			
418	Food Lark Ellen School	1,167.		176.		991.			
419	Food Rowland School	1,430.		231.		1,199.			
420	Food San Jose School	1,148.		220.		928.			
421	Food Sunkist School	1,240.		207.		1,033.			
422	Food Traweek School	2,176.		302.		1,874.			
423	Food Vine School	1,481.		285.		1,196.			
424	Food Workman School	1,282.		222.		1,060.			
440	Laundry	170.				170.			
441	Kitchen Supplies	310.				310.			
442	Office Supplies	20.				20.			
443	Other Expenses	224.				224.			
444	Over & Short in Cash Receipts	6.				6.			
500	Net Ending Balance		10,135.			1,794.			11,929.
		74,902.	74,902.	3,572.	3,572.	29,046.	29,046.	47,650.	47,650

\*Control Accounts—supported by subsidiary ledger.

A proper system must be complete and current; not complex or costly.

2. COVINA SCHOOL DISTRICT CAFETERIA ACCOUNT BALANCE SHEET  
SEPTEMBER 30, 1957

<b>ASSETS</b>	
Cash in Bank .....	\$ 19,185.
Petty Cash .....	34.
Accounts Receivable .....	11,228.
Food Inventory .....	17,203.
Total Assets .....	<u>\$ 47,650.</u>
<b>LIABILITIES &amp; NET ENDING BALANCE</b>	
Accounts Payable .....	\$ 22,707.
Accrued Salaries .....	8,227.
Withholding Tax .....	2,767.
Blue Cross Insurance .....	226.
Retirement Payable .....	949.
Unredeemed Lunch Tickets .....	845.
Total Liabilities .....	<u>\$ 35,721.</u>
<b>NET ENDING BALANCE</b> .....	11,929.
	<u>\$ 47,650.</u>

The balance sheet gives the cafeteria manager a clear picture of the over-all solvency of his operation. All of the individual items are carried forward from the trial balance. (See working papers, previous page.) The vital figure is the current net ending balance which tells how much financial cushion the operation has.

3. COVINA SCHOOL DISTRICT CAFETERIA ACCOUNT  
PROFIT & LOSS STATEMENT  
MONTH ENDING SEPTEMBER 30, 1957

<b>INCOME</b>	
Sales .....	\$ 22,338.
State Subventions .....	6,644.
Total Income .....	<u>\$ 28,982.</u>
<b>COST OF LUNCHES SOLD</b>	
Food .....	\$ 16,380.
Less Discount Earned .....	64.
Labor .....	10,142.
Total Cost of Lunches Sold .....	<u>26,458.</u>
<b>GROSS PROFIT</b> .....	<u>\$2,524.</u>
<b>OTHER EXPENSES</b>	
Laundry .....	170.
Kitchen Supplies .....	310.
Office Supplies .....	20.
Other Expenses .....	224.
Over & Short in Cash Receipts .....	6.
Total Other Expenses .....	<u>730.</u>
<b>NET PROFIT</b> .....	<u>\$ 1,794.</u>

The profit and loss statement (see page 56) tells the manager how well he has fared over a given period of time. It is an indicator of the direction in which the operation is moving and serves to warn the manager of the urgency and magnitude of adjustments he may have to make. The statement is prepared from data already available.

services rendered on a districtwide basis are spread over the total number of type "A" lunches served and charged pro rata in terms of type "A" volume to individual units. Thus, accounting, warehousing and supervisory charges are accounted for.

At the end of each month a trial balance is struck from the general ledger.

The purpose of the trial balance is to verify the accuracy and completeness of postings. The total of the debits and credits columns must be equal. If such is the case, it is assumed that the postings have been performed in an accurate manner and that all essential items of information have been included.

The adjustment entries

In establishing the cash value of the operation at the end of the month, it is necessary to extend the inventory on hand to its cash value. To prepare our statements, two inventories are used. The inventory reflected in the trial balance is that which was arrived at by extending the stock on hand in the central warehouse to cash value. This is taken from our inventory control account. When food is purchased for warehouse stock, the purchase price is debited to the inventory account. As the units requisition the food they need, the inventory account is credited by the amount of the requisition, and the account for the individual unit's food is debited.

The adjustments report reflects the inventory on hand in the individual units. The physical inventory taken at each unit is reported to the accounting department and extended to cash value. The total inventory value of all units is debited in the adjustments column, while the inventory on hand is credited to the food cost of each unit. The adjustment debit is added to the trial balance inventory debit, and the total of these two is debited to the balance sheet.

The balance sheet

The balance sheet is designed to give the manager the financial  
continued on page 56

# WIDEN



# CORRIDORS

## and save space

No school can afford to pay for space it doesn't use for education. Here's how two school districts have eliminated space-wasting corridors. Result: more usable space, much lower construction costs, more effective educational programming.

■ ■ ■ Corridors have long been a stumbling block to efficient, low-cost schoolhouse design. They can take up as much as one-third of the total square footage of any school without giving anything in return except access to classrooms. Total daily utilization is often less than an hour.

Despite this widely-acknowledged fact, possible solutions to the problem have been slow in coming. But two widely-separated East Coast school districts, each employing different architects, have found what they believe is the answer: *Expand corridors by four or five times normal width and convert them into multi-use rooms.*

In Foxborough, Mass., the first school district to completely abandon the conventional corridor concept, the new Robinson Hill elementary school consists of two parallel rows of classrooms and offices separated by a 40-foot-wide "corridor" that is a gymnasium, play room and cafeteria.

In Ridgewood, N. J., the most recent "corridorless" schools are now under construction. Although the de-

sign utilizes the expanded corridor principle, its application is slightly different from that of Foxborough. Here, expanded corridors serve as an extension to the classrooms and library, providing space for an unlimited range of student activities that cannot be conducted in the classroom.

The full benefits of this enlightened approach to space utilization have yet to be tabulated, but at the outset it is apparent that:

- 1) Total space requirements per pupil can be reduced.
- 2) Cost of construction per square foot is considerably lower than for conventional schools.
- 3) The flexibility and accessibility of the "corridors" are a major aid to teaching, a fact borne out by two years' experience in Foxborough.

On the following pages, SM takes a close look at the Foxborough and Ridgewood schools to present a possible solution to waste space problems in the new school your district may be planning.

**TURN PAGE FOR TWO CASE REPORTS ON "CORRIDORLESS" SCHOOLS ►**

# 1 The Foxborough Plan



Areas in color show vividly how Foxborough expanded conventional corridors, converting them into useful space which serves as cafeteria, auditorium, gym and all-purpose room.

**F**OXBOROUGH, MASS., was one of the first school systems to build a "corridorless" school. In so doing, it departed radically from conventional schoolhouse design and its efforts have become widely known as the "Foxborough Plan." Several Massachusetts schools have adopted it and Foxborough is beginning to get inquiries from more distant parts of the country.

The idea started with Schools Superintendent Charles G. Taylor, who passed it along to Architect Harry J. Korslund, of Norwood, Mass., when he began drawing up plans for a new Foxborough school.

"Taylor," said Korslund, "had little use for corridors. He regarded them as totally wasted space and an expensive maintenance item."

Korslund tore up his original plans and followed Taylor's suggestions.

## All-purpose corridor

The result was the Robinson Hill school built in 1955, which consisted simply of two parallel rows of classrooms separated by a 40-foot-wide corridor that is also a cafeteria, a gym and an all-purpose room. A wing of the same design, giving the building a "T" shape, contains offices and rooms separated by another expansive corridor that serves as an all-purpose area.

In the main classroom wing, the corridor also contains at its center, an "island" housing lavatories and storage space, thus dividing the room. Altogether, in addition to a library, offices, teacher workrooms,

and a health office, the school contains 18 classrooms. A stage at one end of the cafeteria enables the room to double as an auditorium.

The school was built at a total cost of \$660,000 and fully equipped for an additional \$34,500. The square foot cost was just \$12.84, the lowest price of 33 schools erected in Massachusetts that year. Although the square footage of the school per pupil (81 feet) is below state average (87 feet), the size of an individual classroom (slightly over 900 square feet) is above the state average.

## Noise is no problem

Most popular objection to expanded corridors, voiced by those who haven't seen them in use, is that group physical activity is bound

to disturb classrooms adjoining the corridor. Not so. Foxborough's experience proves that all noise and vibration can be stopped by inexpensive soundproofing. Here's how Architect Korslund soundproofed the Robinson Hill school:

Walls separating the classrooms and the expanded corridor were built of hollow eight-inch cinder concrete block filled with dry sand. The block was faced—with structural tile in the physical education area, with vertical wood sheathing in the all-purpose area—up to a height of seven feet from the floor. Acoustical tile was used from that point to the ceiling, which was also treated acoustically. Concrete slab floors were divided at the classroom walls by continuous expansion strips to stop vibrations. Finally, classroom doors were of solid wood, the frames fitted with neoprene gaskets which, Korslund found later, were not needed.

The Robinson Hill school is now in its third year of operation and both faculty and administrators are sold on it. Says Elementary Supervisor James Pettengill:

"The school has proved itself functionally superior in many ways. All widened corridor areas are used generally for music, physical education, indoor recess, and noontime recreation, as well as such varied activities as dances and science fairs. The flexibility and accessibility of these rooms to the teacher is a highly desirable feature and noise transmission between the classrooms and these areas has never been a problem.

"The rooms also serve many specific purposes above and beyond the general use. For instance, discharging bus pupils from the building or working on murals or special projects where pupils need an area separate from classrooms, yet directly under the teacher's supervision.

"The kind and quality of program we run at Robinson Hill would be seriously impaired without these very functional areas. As one teacher said after having been in the building a short while, 'This is the kind of building teachers dream of, but seldom are fortunate enough to work in.'"

**MORE SCHOOL FOR LESS MONEY**



**GYM/CORRIDOR** provides spacious, light area suitable for variety of activities. Soundproofing, simple and inexpensive, prevents group noise from disturbing classes behind doors along both walls.



**CAFETERIA/CORRIDOR** provides pleasant, convenient area for feeding Robinson Hill students. Room is also auditorium. Note kitchen counter at left, class doors along right wall, corridors along both walls.

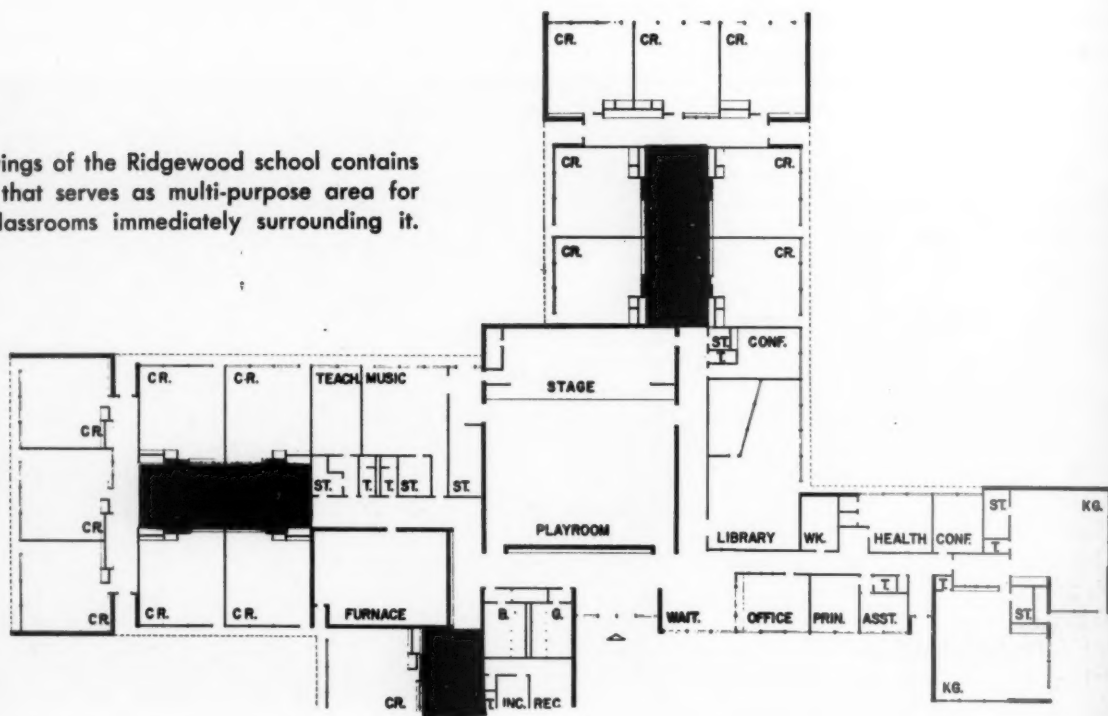
**TURN PAGE FOR A DIFFERENT EXPANDED CORRIDOR SCHOOL**

MORE SCHOOL FOR LESS MONEY



## 2 The Ridgewood Plan

Each of the three wings of the Ridgewood school contains expanded corridor that serves as multi-purpose area for the six or seven classrooms immediately surrounding it.



**A** YEAR AGO, the voters of Ridgewood, N. J., turned down a board of education bond issue proposal for two new elementary schools plus an addition to an existing school. The board and its architects revised their plans, scaling the proposal down by a half-million dollars.

### The voters gave their approval

One key to the reduction in cost had been in the design. Spurning conventional planning, Architects Sherwood, Mills and Smith of Stamford, Conn., applied the expanded corridor principle in the hope of getting more usable space for less money. They did better than they expected. Estimated cost of the entire project had been \$20 a square foot, which turned out to be \$5 more than actual contractor's bids.

Decision to expand the corridors, explains Lester W. Smith, one of the architects, came after noting the fact that for every two conven-

tional school classrooms, there is at least 30 feet of corridor, nine- or 10-feet wide, which serves no educational purpose.

"We decided," says Smith, "to attack this as a source of educational improvement."

Each of the wings of the West Ridgewood Avenue school, one of the two new schools now under construction, was designed to consist of six or seven classrooms surrounding a widened corridor which has more space than any one of the classrooms. These wide corridors will serve as classroom extensions. Walls of some of the rooms will have windows so that the teacher can supervise from either the room or the corridor.

The addition to the existing school is designed as a five-classroom cluster, with the expanded corridor as its core.

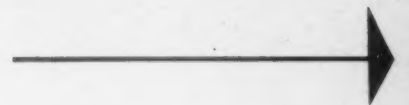
Although construction of the three Ridgewood schools is not yet complete, planned uses of the multi-

purpose corridors are virtually unlimited. For instance, they are suitable for joint use by more than one class, for eating lunch or refreshments, for certain types of physical activity, for group work outside the class, for audio-visual instructions, for recess in inclement weather, and for exhibits and similar teaching aids of interest to the entire age group in the rooms which surround the corridor. Storage is also provided for folding furniture to add to the room's flexibility.

Cost of this expanded corridor, in contrast to that of a similar school with conventional corridors, has not been determined. The best estimate, says Smith, is that the area by which the corridor was enlarged costs from \$3 to \$5 a square foot, less than a third of the per square foot cost for the remainder of the school.

"Widening the corridors was so cheap," says Smith, "it seemed foolish not to do it." **End**

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# How to control a pupil transportation program

The toughest part of any transportation program is "handling the kids." Here are the recommendations of a nationally-known mass transportation authority on how to organize a bus program and how to maintain discipline.

By L. E. WINDER

**EDITOR'S NOTE:** The author of this article is director of transportation for the Normandy School District in suburban St. Louis. He has been a contract operator as well as a consultant in the field of pupil transportation. This article is devoted to the physical problems of handling and controlling the student passengers.

■ ■ ■ Once a district has laid out its bus routes and assigned students to specific bus runs, the really

difficult part of a mass transportation program begins. The next steps to be taken fall in roughly the following sequence:

1) Set up a record control system for reporting pupil attendance on the buses.

2) Communicate route and bus assignments to the pupils.

3) Brief students and parents on discipline standards and penalties.

Shortly after school closes in







• New vinyl "PX" cloth can be used at normal temperatures and speeds on conventional casing and forming machines. Mr. S. G. Gervase, President, John F. Cuneo Company, is seen inspecting three of the "Beginning-to-Read" series as they come off the case-making machine. Covers were bound in vinyl "PX" cloth for the Follett Publishing Company of Chicago.

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For free sample swatches mail the coupon or write: E. I. du Pont de Nemours & Co. (Inc.), Fabrics Division BP-85, Wilmington 98, Delaware.

\*"PX" and "Fabrikoid" are Du Pont's registered trademarks for its impregnated and coated bookbinding materials. Patent for vinyl "PX" cloth has been applied for.

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(For more information, see last page)

# How Normandy loads its buses . . .

**O**n a normal day, the Normandy transportation department will load 1,350 high school pupils on 15 buses in only 13 minutes! The same speedy process takes place at the junior high school at the end of each day. Here's how the system works:

The closing bell rings in the high school at 2:30. The first buses leave at 2:40, a second section leaves at 2:45, and the third section leaves at 2:50 or thereabouts. Each student knows what section he is in and that he must present himself promptly in order to make his bus. No substitution to other buses is allowed.

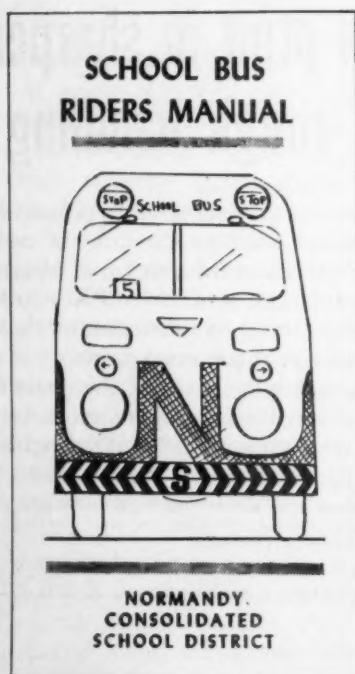
Six buses are loaded at a time under sheltered areas (see photographs and diagram).

**1** **Three buses** face one direction and three face the other. Boarding corridors are on each side of the loading ramp.

**2** **Three exits** from each corridor lead to buses. Exits are exactly a bus-length apart and each student knows which one leads to his bus.

**3** **Normandy students** enter their buses from two covered corridors. With this set-up six buses can be loaded in five minutes or less without confusion. Although Normandy has specially constructed corridors, same effect could be obtained by roping off areas.

**4** **Students show** their ticket to the driver who immediately punches a hole in the attendance record card at the right.



**Normandy students** receive this booklet at the start of the school year, outlining rules and regulations governing bus trips.

attendance report" (see illustration on page 38). This work is done by students working in the transportation office. They are paid at the rate of a dollar an hour for the job. It should be noted that our monthly report is a very simple record. The student numbers are pre-printed on the form and columns are provided for each day in the month. It isn't even necessary to post the student's name. At the end of the month, the total days absent are added together.

Once a month, in the transportation office, we post from the monthly report to the annual attendance record (see illustration on page 38). This is the basic document which is audited by the state in order to establish our transportation aid. It gives the name, age, and grade of the pupil, the distance transported, and the numbers of days absent each month. In the last column, we record the total days the student was actually present on the bus. It should be noted that this record is kept on a "bus run number" basis,

thus simplifying our record-keeping system. In other words, it is nothing more than an extension of the daily punched card carried to its logical end.

## Educating the pupils

In our school system, we provide bus transportation only for the junior high school and the high school students. So, toward the end of the school year, I have a meeting with all of the sixth grade students who will be entitled to bus transportation the following year. We explain to them how our bus routes are run, our ticket system, and lecture them on bus safety. At the same time, we issue a 36-page pocket-size booklet which we call the "School Bus Rider's Manual." This little booklet answers all of the most common problems in question-and-answer form and is heavily illustrated with cartoons that emphasize good safety habits.

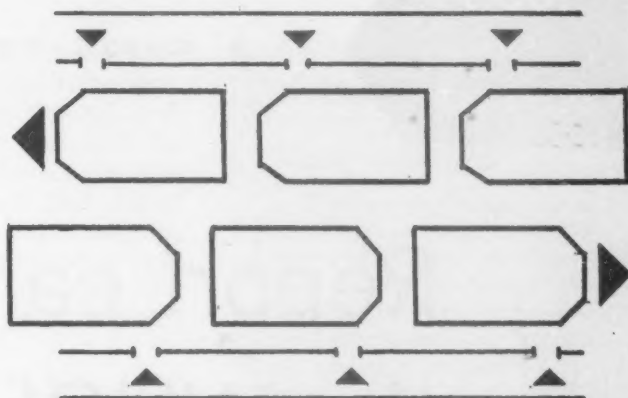
We also send a letter home to the parents which tells them, in friendly fashion, our rules and reg-



1



3



2



4

ulations, and the disciplinary measures we use to penalize troublesome riders.

In addition to this general indoctrination, I have a series of meetings with our bus drivers. The driver is the key to the whole situation. He must command respect. We have found that if the kids ever get the upper hand over the driver at the beginning, he has lost his value to us.

The drivers are told that you can't expect a bunch of high-spirited kids to act like saints. We allow them to make some noise—laughing, talking, and even some singing, if it isn't too loud—but there are other things that just aren't tolerated. There is no scuffling allowed. No rolling windows down and leaning out. No spitting or hollering through the windows. Just as important, we insist that any child who damages a bus willfully must pay for his vandalism.

#### Handling discipline cases

If a driver has trouble with a

student, we have an organized procedure for cracking down. The bus ticket is the key to it. The driver is instructed to take the ticket of any unruly rider. He instructs the student that he can continue to ride the bus until a disposition is made, but his ticket is turned in to the transportation office together with a report on the offense. I schedule a personal meeting with each offender. If it is a first offense, and not a serious one, the student gets a lecture and his ticket is returned. The transportation office immediately sets up an "offense card" for that student. We have found that 99% of our pupils will follow rules. So we want a running record of the 1% that persist in making trouble.

If a student is sent to me on a second offense, I may talk to the parents before returning his ticket. If it is a really serious offense, like cutting up one of the seats, we won't return the ticket until they pay for the damage done. Our transportation office also has authority to suspend a student's bus transportation

for as much as six months to a year if this is necessary to maintain discipline. I should add that the superintendent backs us up on any disciplinary action we take.

#### Controlling field trips

On special field trips our record keeping system is designed to provide control rather than to supply supporting evidence for state aid. Again, we use our ticket system, but, in this case, special tickets are issued for each trip. Under normal circumstances, we provide a teacher for each 15 students scheduled for a trip.

When we make a stop, the children are under the direct control of the teachers. When it is time to go home, we use our punched card method for checking the pupils back aboard. It is relatively simple to tell if anyone is missing and we can't very easily lose a student. In fact, we have taken as many as 500 children 185 miles from school and brought them back without any difficulty.

End

# Report cards that tell the WHOLE story

Using business control methods, an Ohio high school is able to send out reports that tell parents virtually everything about the student. Surprisingly, the system has drastically reduced "paper work," too.

■ ■ ■ Almost every educator has wrestled with the problem of closer communications between parents and the school. At the elementary school level, the mechanics of the problem are relatively simple. The child has one teacher. Hopefully, the teacher can "reach" the parents—through conferences, school "nights" or the PTA.

In high school, the problem is

much more complex. The report card is practically the only dependable medium of communication. But, because as many as five or six teachers are involved with each pupil, even this basic tool can do little more than report strictly on academic progress.

In their efforts to somehow make the report card a more meaningful instrument at the secondary level,

officials at Washington High School, in Massillon, O., have found a solution with several important virtues:

1) The new report card system permits *all* of a pupil's teachers to comment with more than a mere numerical grade.

2) It actually reduces the clerical chores of the teachers, even though they report more completely.

3) The school, itself, has valuable

## ALL TEACHERS GIVE STUDENT COMPREHENSIVE APPRAISAL

Washington High School's punched-card report cards score students not only in academic areas, but in 10 categories of citizenship development, plus tardiness and absence. Note space for teachers' comments. In citizenship grading, students receive a + mark for outstanding and a U for unsatisfactory. No mark indicates satisfactory.

SEN. 7 4 2 1 7 4 2 1 7 4 2 1 7 4 2 1 7 4 2 1		PERIOD		INSTRUCTOR		SUBJECT		STUDENT NAME		CODE		CLASS OF	
<b>SUBJECT REPORT CARD</b> WASHINGTON HIGH SCHOOL MASSILLON PUBLIC SCHOOLS - MASSILLON, OHIO L. J. SMITH, SUPERINTENDENT OF SCHOOLS I. W. SNYDER, PRINCIPAL						STUDENT'S NAME <b>DOE, JOHN</b>		CODE <b>256</b>		CLASS OF <b>60</b>			
PHONES PRINCIPAL'S OFFICE TEL. 2-7881 ATTENDANCE OFFICE TEL. 2-3480						SUBJECT <b>AMERICAN ENGLISH</b>		CODE/INSTRUCTOR <b>31 MR. JOHN SMITH</b>		CODE PERIOD <b>15 6</b>			
<b>CITIZENSHIP RATING</b>						<b>GRADE</b>		<b>ATTENDANCE</b>					
1 2 3 4						1 2 3 4		1 2 3 4					
RESPECTS RIGHTS AND OPINIONS OF OTHERS						CLASS GRADE <b>C B B B B+ A A A</b>		UNEX. CUSLD <b>3</b>					
ACCEPTS RESPONSIBILITY						CLASS ABSENCE <b>3 1 4 1</b>		EX-CUSED <b>1</b>					
PRACTICES SELF-CONTROL						INSTRUCTOR'S COMMENTS:		TIMES TARDY					
IS CAREFUL WITH PROPERTY													
IS ATTENTIVE													
THINKS AND WORKS INDEPENDENTLY													
USES TIME TO ADVANTAGE													
FOLLOWS DIRECTIONS ACCURATELY													
IS PREPARED TO RECITE													
PROGRESS AIDED BY REGULAR ATTENDANCE													
<b>GRADE</b>						<b>ABSENCE</b>		<b>ADWV</b>					
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z						1 2 3 4 5 6 7 8 9 10 11 12		1 2 3 4 5 6 7 8 9 10 11 12					

extra information as an aid in pupil guidance.

#### How the system works

The form and philosophy of the time-honored report card has been replaced by an adaptation of the punched card control system long in use by business and industry. It is not a "machine" system, however. The mechanics are completely manual and are handled in the school office by clerical people, rather than by the teachers.

At the beginning of a semester, a five-page report card "pad" is prepared, by school secretaries, for each subject a student takes (*see cut*). The cards contain the student's name, the subject, the teacher's name, and the graduating class to which the student belongs. This information, as well as all other data pertaining to the student, is punched in code along the edges of the cards so they can be sorted later by the Keysort method, a *manual* process.

After all of the report card sets or pads are typed and punched, they are sorted alphabetically by classes, using the punch markings, and are then distributed to teachers. When the first marking period comes up, the teacher fills in with pencil the pupil's numerical mark plus a rating on 10 different characteristics that come under the heading of citizenship. Absences and tardiness are also marked. The area of the card covering grades is carboned on the reverse side of each leaf in the pad. Thus, the numerical grade is carried through to the other cards which will be used in future marking periods.

There is also a special space for written comment by the teacher. This does not carbon through and is virtually a private communication between the teacher and the parents. Thus Johnny may receive helpful suggestions or criticism without it becoming a matter of scholastic record.

When a teacher has finished marking all of the pupils in a class, she sends the pads back to the school office. The punched holes in the edge of the card are used to sort out all of the pads for a given student. Then, the top card is re-

moved from each set, placed in an envelope, and mailed to the parents. The card sets, minus the top card, are returned to the files until the next marking period when the process is repeated and fresh report cards issued. At the end of the year, the fifth card in the set—which contains the grade record for the student for the entire year—is placed in school files.

There is a different color report card for each of the four grading periods. This makes identification easy and prevents clerical mistakes. Black is for the first grading period, brown for the second, blue for the third and red for the fourth. The fifth card is green in color and is made of thin cardboard, for durability, in contrast to the report cards which are of lightweight paper.

#### Parent reaction enthusiastic

Response from parents, often in the dark as to just why Johnny gets the marks he does, has been enthusiastic. The school sent letters to parents of all of its students requesting their reactions to the new method. Typical of the response was the following comment, "It's fine. You do all the work and we get all the information."

Parents said the system not only gave them a more comprehensive analysis of their children's activities and habits in school, but identified the teachers in a more personal way than did standard report cards.

Students found the system a double benefit. By easing the teacher's clerical load, it gave them more instruction time, and by pinpointing their scholastic weaknesses it enabled them to strive for specific improvement.

The amazing part, reports Washington High School principal Irvin W. Snyder, is that "all the work" is really *less* work than was done under the old standard system. At the same time, Snyder admits that his school perhaps compiles more data on students than many other officials might feel is necessary. But, he points out, this information is easily come by and used, thanks to the punched card sorting method which provides quick access and fast cross analysis. **End**

#### OTHER SCHOOL USES FOR PUNCHED CARD SYSTEMS

Punched card report cards proved so successful at Washington High School in Massillon, O., that the school applied the same system to solve two other problems: Student scheduling and football strategy.

#### Ends laborious chore

The complicated task of scheduling classes for the school's 1,450 students has been reduced from the laborious writing of thousands of words, and the complex filing and cross-filing of schedules, to a series of checkmarks on 8 by 11-inch punched cards.

Gone, too, say school officials, are the hundreds of frayed and dog-eared records that were a part of the old system.

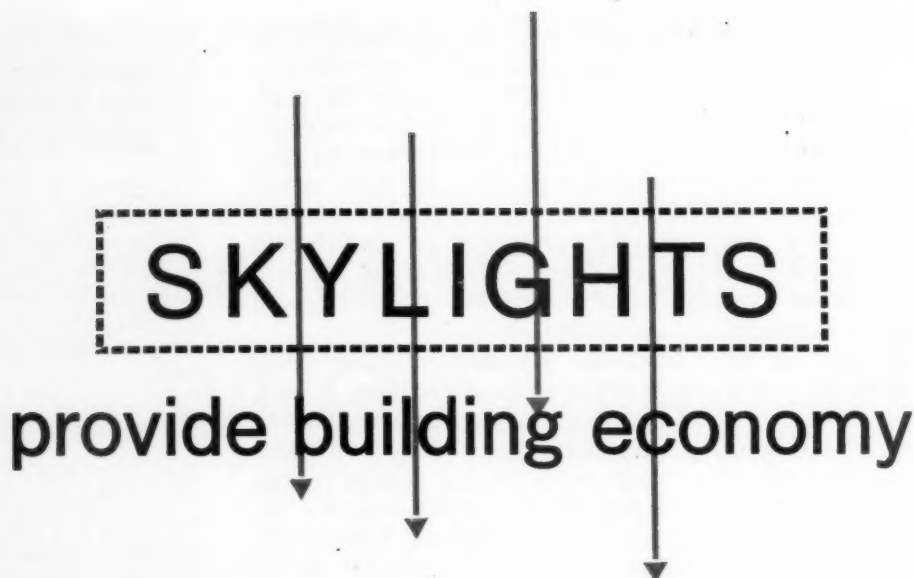
Each student's history is represented by checks on a pre-printed punched card which is specially notched to permit immediate manual sorting, via the Keysort process, by any one of a dozen or more categories into which students can be grouped: classes chosen, classes preferred, year in school, age, sex, grade rating.

Once sorted, scheduling cards for the entire school fit easily into a single file drawer.

#### As a gridiron tool

Massillon's football team, perennial Ohio school champions, use the same punched card system to develop their winning strategy by methodical study of opponent tactics.

Notations of scouts and observations of game movies are translated into notches on 8 by 11-inch cards. This enables Coach Lee Tressel to sort them quickly by any type of offensive and defensive alignment or scoring play, and to present a cross-analysis of opponents for the benefit of his team.



# SKYLIGHTS

provide building economy

Here's a promising new building feature that offers improved lighting and substantial construction savings to schools.

■ ■ ■ Most classrooms have a long window-wall, and a shorter window-to-inside dimension in order to bring natural light into the room. It's a costly proposition for several reasons:

- 1) The school building or wing tends to be long and narrow, thus requiring a longer and more expensive exterior wall.
- 2) Ceilings must be relatively high so that windows will be high enough to bring natural light to the inside parts of the classroom.
- 3) Non-productive corridors are stretched out in the elongated building, as are mechanical services such as plumbing and heating.

**Solution:** the "old fashioned" skylight.

In the new elementary school at Bainbridge, Md. the architects (Finney, Wolcott & Assoc.) have solved these problems with the ingenious use and placement of "skylights" called Toplite panels (*see*

*pictures, opposite page*). While there's nothing new about the idea of skylighting, there is much new in the way it has been adapted at Bainbridge. For example:

The glass panels in the skylights are actually scientifically designed units of prismatic glass which work with the sun. They admit north light in all seasons but reject solar heat during critical sun positions. Glare is eliminated.

A photo-electric cell is placed in one Toplite ceiling-wall in each room. It measures the amount of light coming through the panel and actuates a Weston "electric eye" control which turns the electric lights up or down. Result: ideal desk-level lighting conditions at all times.

#### **Economy factors**

An average Bainbridge classroom is 28 ft. by 35 ft. But, because each room has five "Toplites," the more-costly-to-build window walls are the shorter ones, thus reducing

the exterior perimeter of the building. To this saving can be added the lower ceiling heights which are permissible since light need not be projected from windows to the inner recesses of the room. Ceilings in Bainbridge are 10 ft. high and could be made lower according to the architects.

On all but the darkest days, little or no electric light is needed. This was amply proved when it became necessary to occupy the building before it was completed. For two months classes were conducted before any lights were operating.

Additional operating economies were made possible because the shorter exterior walls mean less heat-loss during cold weather. When weather is warm, adequate ventilation is assured by the presence of exhaust fans in the skylights. **End**

*For more detailed information about Toplite panels, please check number 781 on the Reader Service Card bound in this issue.*

## SKYLIGHTS



**Skylights solve the lighting problem for these two Bainbridge, Md. classrooms. In one case (top) they provide area's only natural illumination while in the other (below)**

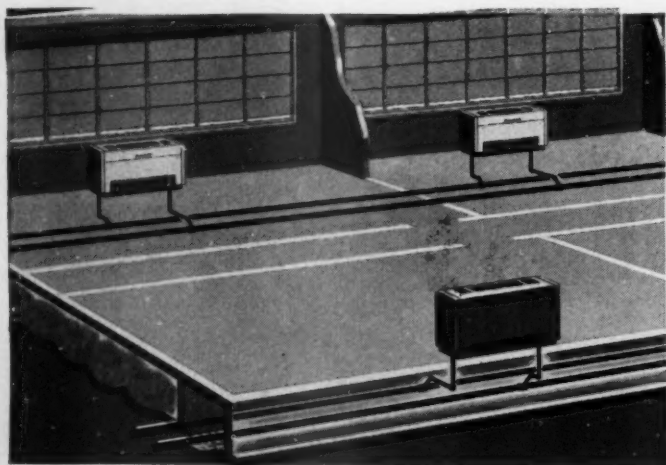
**they supplement light from windows. They are made of specially cut prismatic glass which allows maximum light but rejects excess solar heat.**



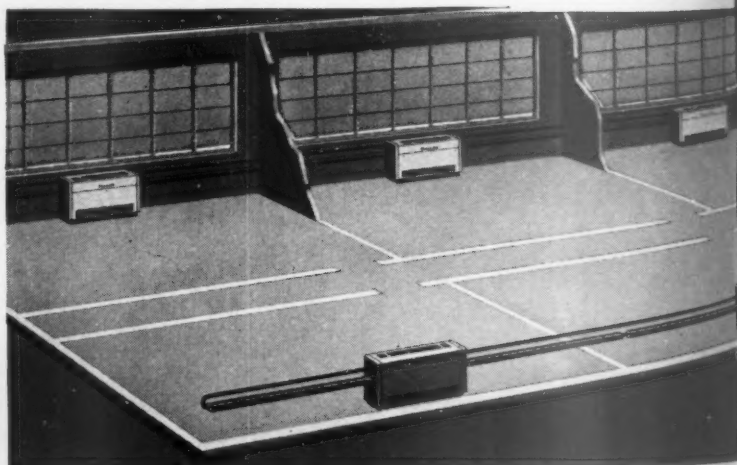


▲ Teacher and pupils are comfortable in any weather . . . in every part of the room with this Nesbitt heating, ventilating and natural cooling system. It combines the use of a Nesbitt Syncretizer unit ventilator in each classroom with Nesbitt Wind-o-line radiation installed all along the window sill (see above). Radiant heat protects teacher and pupils

against excessive loss of body heat; while convected heat along the sill warms chilling downdrafts. Three-way classroom payoff: outstanding comfort, operating economy, good appearance. Layout diagrams below help to show how the Nesbitt Series Hot Water Wind-o-line System provides protected learning environment.



▲ Conventional layout (showing how perimeter trenches are used to carry the supply and return piping under the floor), is used for both steam and hot water systems. As you can see, it calls for costly trenches or crawl space, mains, runouts and pipe insulation. All take a big bite out of your heating and ventilating dollar, and all can be dispensed with when you use . . .



▲ the Nesbitt Series Hot Water Wind-o-line System. The Nesbitt Syncretizer unit ventilator, installed in each classroom on this system, requires only about  $\frac{1}{3}$  as much hot water as do conventional systems. As a result, smaller pumps and pipes are used. The only supply and return piping you need in a classroom wing (see above) is the Nesbitt Wind-o-line Radiation itself.

Here are the figures that prove you can have a

# Quality Heating and Ventilating System

... within a sound, realistic budget!

Nesbitt Systems are making possible savings of as much as 20% over conventional systems in typical schools all across the country.

## Some of the Recent Low Costs for Quality Heating and Ventilating Systems:

### IN NEW JERSEY \$1.67 sq. ft.

Pennsauken High School,  
Pennsauken, N. J.  
Architect: Faint & D'Anastasio  
Engineer: John Knecht  
Capacity: 1800 pupils  
Gross Area: 188,000 sq. ft.  
Total Contract: \$2,844,659  
Heating and Ventilating: \$314,986

### IN OHIO \$1.91 sq. ft.

Young Elementary School,  
Springfield Township, Ohio  
Architect: W. B. Huff & Assoc.  
Engineer: Paul Fleming  
Capacity: 300 pupils  
Gross Area: 22,000 sq. ft.  
Total Contract: \$335,071  
Heating and Ventilating: \$42,025

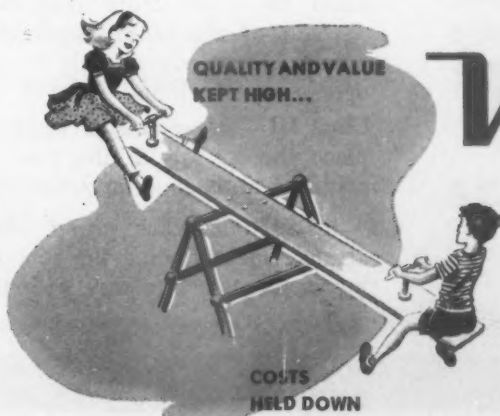
### IN ILLINOIS \$1.41 sq. ft.

Creve Coeur Elementary School,  
Creve Coeur, Illinois  
Architect & Engineer:  
George Poppo Wearda  
Capacity: 256 pupils  
Gross Area: 11,800 sq. ft.  
Total Contract: \$156,124  
Heating and Ventilating: \$16,664

■ ■ ■ Compared with the installed costs of some other systems, the Nesbitt Series Hot Water Wind-o-line System saves you as much as 20% on construction, equipment and installation costs. Each classroom has its own Nesbitt *Syncretizer* unit ventilator for heating, ventilating and natural air cooling. And Nesbitt Wind-o-line radiation extends along the sill to protect pupils seated near windows from cold walls and window downdraft.

No other unit ventilator provides *controlled* heating, ventilating and natural cooling as effectively as the Nesbitt *Syncretizer*. When used in combination with Nesbitt Wind-o-line radiation, the result is healthful, productive comfort—free of physical distraction—for every pupil in the room whether he sits near the window or at the other side of the room. *Only the comfortable student can maintain maximum learning efficiency.*

Send for the big book on the value of controlled ventilation. More Learning per School Dollar.



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(For more information, see last page)

# How much should a district charge for Community use of the Schools?

Mounting demands from a wide variety of community groups have forced school boards all over the country to face this knotty problem. Here is how three districts have resolved it. All have one point in common: standard fees, set in advance.



■ ■ ■ After years of quibbling with various community organizations over after-hours use of school buildings and facilities, the Minneapolis Board of Education tried to simplify matters recently by establishing a fixed scale of rental fees. The action brought a howl of protest from many groups which had been using Minneapolis classrooms, auditoriums, gymnasiums and athletic fields for meetings, forums and even entertainment programs, often without charge.

Minneapolis' problem is typical of one that is all too common in hundreds of US school districts today. The schools are often the only buildings in town available for public gatherings, and without them many worthwhile organizations and events would be severely handicapped. Yet the cost to the school district, in terms of increased utilities, custodial help and wear and tear, has forced many to levy rental fees, sometimes on an individual basis, a practice which can result in ill-will.

Here is a report on how three widely-separated school districts—Billings, Mont., Denver, Colo., and Albuquerque, N. M.— have solved the problems of after-school use of their facilities while making a real contribution to the welfare of their communities.

## Billings

■ In Billings, Mont., public school facilities have been rented to community groups for the past 25 years. Fees, recently raised to cover increasing operating and maintenance costs, are based on the similarity between the objectives of the group using the school, and the aims of education.

All applications for school building use fall into one of three categories:

**Class I**—Teacher and student groups, and the PTA, which are allowed use of buildings rent-free.

**Class II**—Civic clubs and other organized groups devoted to community interest or child welfare pay nominal fees designed only to cover the actual costs of opening the building.

**Class III**—Organizations which charge admission, and place the schools in the position of competing with private halls or auditoriums, pay the highest fees.

In addition, each group using the buildings signs an agreement freeing the school from any liability or involvement in any way with the group or its use of



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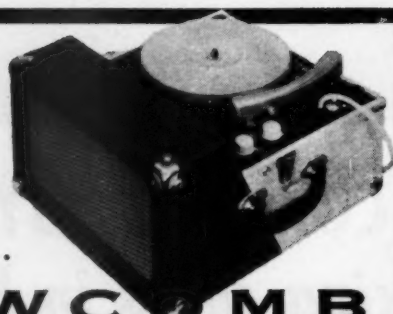
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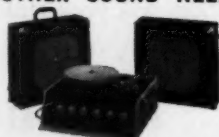
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the building. Federal admission taxes, if admission is charged, must be paid directly to the government by the renter.

Rental fees do not include the use of equipment such as public address systems or electrical scoreboards. If they are used, they must be operated by school employees whose wages would be included in an additional fee.

Here is a resumé of Billings' rental fees:

**Auditoriums**—\$60 to class II groups, \$125 to class III.

**Gymnasiums**—Class II: \$50 for elementary and junior high, \$75 for high school. Class III: \$75 for elementary school, \$100 for junior high, and \$150 for senior high.

**Stadiums**—\$100 to other high schools, with locker facilities \$50 extra. Class III users pay \$150 for daytime use, plus \$100 for locker facilities. Night time use of the stadiums costs an extra \$50. Class II users pay only \$50 days, \$100 nights.

**Multi-Purpose rooms**—Class II, \$10 for two hours. Class III, \$25.

**Classrooms**—Class II: \$6 for the first room, \$3 for each additional room. Class III: \$8 for the first room, \$4 each for additional room.

All revenue from the rentals is placed in a special maintenance, upkeep and overtime fund. The program now operates at a profit.



## Albuquerque

■ Albuquerque is a city that has doubled its population many times in the past few years. Until the city completed construction of a civic auditorium last year, the schools were virtually the only facilities in town available for public meetings. The school system responded to the need with a rental plan that levied fixed fees to all organizations, except youth groups, plus an hourly charge (\$1.50) for the services of a custodian. Youth groups such as the Boy and Girl Scouts were allowed use of buildings free, but were asked to pay for the custodian's time.

A majority of rentals are handled by the school business office, although those for purely recreational purposes come under the school recreation department, which occasionally loans its equipment free of charge.

Fees levied by the business office and the recreation department differ slightly. Gymnasium rentals for non-athletic fund-raising events is \$75; for an athletic event \$150. The same building is rented to a charitable organization which does not charge admission for \$35. Classroom rentals are \$5 each to all groups. Albuquerque rents its main high school auditorium, the largest in the city, for \$18 a night in the summer, \$23 in

(For more information, see last page)

winter, with \$5 for use of the public address system. In each case, custodial fees are extra.

Generally, rates to non-commercial groups are only high enough to cover actual costs. A square dance group, for example, rents a high school cafeteria for \$15 per night, including the custodian's fee.

All rental proceeds go into the school district's general fund after actual costs have been paid.

## Denver



■ Encouraged by school officials, more than one million persons use Denver's 103 schools after hours every year under a 34-year-old program. Each year it costs the school district about \$18,000 above what it receives in rental fees because facilities are offered free to all semi-educational groups, youth organizations and several varieties of civic endeavors, including fund drives and Civilian Defense. School space is provided the city at election time on an actual cost basis.

The school board's policy of encouraging school use is at least partly responsible for Denver's reputation as the basketball capital of the west. School teams and those of the city league keep most Denver school gyms busy nightly until 10. Among the renters are teams from parochial schools which do not have their own gyms. Teams other than those of the school, pay only \$3 for two hours in an elementary gym, \$4.50 for the same period in junior high school gym, and \$5.25 for a high school gym.

Rentals otherwise are on a fixed scale, with fees varying according to the group requesting the facilities and the type of event planned. The PTA, for instance, pays only actual costs when it stages a fund raising event. Private promoters, seeking school facilities for money-making events, pay a higher commercial rate.

An emergency clause in school regulations allows religious bodies to use the schools for church services for a limited time.

All applications for use are handled by the business office which screens them for desirability, although the school board's policy is a liberal one. The custodian on duty at the time of use makes a report to the business office afterward on the time the facility was in use, the light and heat required, and the condition of the building and equipment before and after use. There has been only one complaint of damage in the past five years.

The schools are also used for adult education courses, and during the summer for a recreation program conducted jointly by the schools and the city recreation department. Adult weekend recreation events throughout the year are also held at individual neighborhood schools.

**End**

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SC-6

(For more information, see last page)

## Hire an architect

*continued from page 25*

fee. The architect and the engineer are forced to use untailored handbook answers. But sometimes it is more direct. For example, some years ago I was consulting architect to the New Orleans School Board. We had always put in individual showers for girls in our schools. At that time, we made a very careful study of the situation and we found we could save, as I recall, \$200,000 by using "gang" showers. We could save \$200,000 in plumbing, in floor area, and in finishing items.

**Q:** This was for a series of schools?

**COLBERT:** This was in six or eight schools—I don't recall the exact number. The word got around. Then, at a public school board meeting, a rather obese woman came in and gave a public demonstration of how it would look to see girls bathing together. Everyone was so astonished that the school board immediately said, "Put in individual showers in separate stalls for all the girls." They did this, mind you, when Wellesley and other girls schools throughout the nation have been using gang showers for years.

**Q:** Going back to overbuilding structurally, isn't it possible that school boards are also looking for an extra margin of safety for the children themselves?

**COLBERT:** Yes—and it can be carried to ridiculous extremes. But what I really have in mind are the structural safety factors.

**Q:** Can you give me an example of that?

**COLBERT:** Let's take a simple one. Let's take a school that is going to use wooden floor joists and wooden ceiling joists. Because of the variations in the product, common handbooks use a factor of safety in design somewhere in the neighborhood of six. In other words, these wood members will support six times the load that we will reasonably put on it. That's what the handbook calls for. Now, by improving our inspection techniques,

by knowing what kind of lumber we are going to get and by being sure that it has predictable characteristics, we would be able to halve that—and still have a safety factor of three.

**Q:** Earlier you said you were architect to the school board in New Orleans . . .

**COLBERT:** Supervising architect for the Orleans Parish School Board.

**Q:** What about this function—is it common?

**COLBERT:** I think it is common in all large cities, in one form or another. Sometimes they are employees, or they can be independent architects acting as consultants.

**Q:** Might this not be a good idea for a smaller district? If it couldn't afford a full time man, couldn't it retain a firm on some other basis? The firm might never build for the district, but would be sort of an

"... the search  
for doing things  
better ...



"... makes the  
difference in  
architecture."



*"I find that the most obvious mistakes are made by men of great experience . . . a man becomes overspecialized . . . so sure of himself that he doesn't search"*  
Colbert



"inside member" of the school team and could help the district over-all planning.

COLBERT: I haven't heard of it in our area though some school districts use the same architectural firms for all their buildings for generations.

**Q:** Suppose a smaller school district came to you with the kind of proposition I just outlined. How much would you charge for your services?

COLBERT: We could charge on a per diem basis, or on an annual retainer, or on a basis of a percentage of all construction costs that we supervised.

**Q:** What would a good architect charge in dollars, using any of these methods?

COLBERT: It would depend upon how much service he had to render,

how much time he had to spend. For example, I suspect that the best way to handle such an idea would be to have the supervising architect sit in with the board as a continuous advisor. In that case, he is more than an architect—he is a planner, too, because he is interested not only in the individual school but in the over-all system. In a case like that, I would say that this service should be worth about 1% of the total cost of building done. This would not include land acquisition, furnishings, etc., but only the cost of physical construction.

**Q:** In other words, instead of paying 6% as an architectural fee, the district would pay 7%?

COLBERT: That's right.

**Q:** You've got a potential problem here. In a smaller district, chances are they don't build very frequently. In that case, wouldn't you have to ask for a minimum guaranteed annual fee?

COLBERT: There should be a minimum in some instances. For example, if the district's building amounted to only a half a million dollars a year, that would be only \$5,000 at 1%. I doubt that an architect could give you a great deal of service for that fee . . . not if he was expected to operate as a planner and a permanent member of the team, as you've called it.

**Q:** What would the fee be in that case?

COLBERT: I don't know. I don't mean to be evasive, but every situation would be different. Let me give you the two extremes. In one case, we would merely sit with the school board once a month and, maybe, get a few phone calls. Frankly, I wouldn't be interested in that sort of a thing. But at the other extreme, let's take an actual community where we are now retained as city planners. In this case, one phase of our study is school needs. We

prepare for them, as a part of a city plan, recommendations as to where their schools should be located in the future, what size they should be, how much land they should buy for sites. We assist them with the relationship of school sites to parks, clubs, and playgrounds. Now, if the school board called us in in that community to do the consulting job you describe, we would have a completely different set of circumstances.

**Q:** You don't believe this practice is common in many of the smaller districts?

COLBERT: I haven't heard of it. I have seen it at the college level—all of our colleges have consulting architects. But, unfortunately, many of them are old fuddy duddies who have outlived their purpose. They know the proper people on the board of administrators so they can retain their jobs.

**Q:** Do you believe the average architect could do the long range planning job you describe? Is he trained for that?

COLBERT: I don't know of anyone better trained in the average community.

**Q** *There is one more area I would like to explore in this matter of choosing an architect. Should a school board look for a schoolhouse specialist—a man or a firm who has built several schools before?*

COLBERT: Several years ago, before I built my first school, I would have said, "no." Strangely enough, I still believe this. In the last 10 years, I have learned that the first building type that a firm or an individual does is usually the best—the most contributive. I don't care whether it is a school, or a church, or a hospital—I don't think that they ever improve a great deal over that first

## CHOOSING AN ARCHITECT

The American Institute of Architects and the National Council on Schoolhouse Construction have designed this form to make it easier for school boards to select the best architect for any particular job.

### A Information by the school system to the architect:

- 1 Name of school system
- 2 Name of superintendent or other person to whom questionnaire should be returned
- 3 Size of system (pupil enrollment)
- 4 General description of proposed projects
- 5 Approximate timetable for planning & construction period

### B Architect's questionnaire:

- 1 Name
- 2 Business address
- 3 Telephone number
- 4 Type of organization (check one)  
☐ individual ☐ partnership ☐ corporation
- 5 Names of principles, professional history, professional affiliation, key personnel, staff organization: (attach information if you prefer)
- 6 Attach list of completed buildings your firm has designed during recent years. If you have recently established your own practice, indicate prior responsible affiliation with other projects. Underline those which you feel are examples of your work appropriate to our problem & which you would like to have listed.  
Include cost of building, type of building, location & dates of construction. (use separate sheet)
- 7 Give names of persons to whom the board of education may write. These persons should have knowledge of your firm & your work
- 8 Attach any other material which might help the board of education. In questions 7 & 8, the board is interested in finding out about you:
  - integrity • thoroughness • creativeness • adequacy of supervision • business procedures & record keeping on the job • financial responsibility
- 9 If you are called in for an interview, you will be asked to furnish information indicating:
  - that your organization is adequate to do the job
  - that previous commitments will not prevent expeditious planning of this project
  - that you are willing to devote time to carry out cooperative educational planning with designated school staff members or committees
  - completeness of contract documents (plans & specifications)

one. The motivation is there. . . .

**Q:** Might not a specialist avoid obvious mistakes?

COLBERT: I find that the most obvious mistakes are made by men of great experience. That is not a generality—it is a specific statement of fact. When a man becomes overspecialized he becomes overly self-assured in his knowledge. Moreover, he is so sure of himself that he doesn't *search* and it is this search for doing things better that makes the difference.

**Q:** You're talking about creativity. But what about this potential for making an obvious mistake?

COLBERT: Give me an example.

**Q:** Let's take the case of these multi-purpose rooms that have popped up all over the country. Some of them are pretty miserable—for example, combining a gymnasium with a cafeteria—isn't that a trap that a man building his first school might fall into? He might look over the literature of schoolhouse architecture, or the architectural magazines and in every plan he will see a multi-purpose room.

COLBERT: I don't think that is the way a competent young architect starts designing a school. He doesn't go through magazines. He starts by visiting schools and studying the nature of the basic problems. After he understands the general function of the building, he will undoubtedly look for specific answers.

**Q:** Aren't you a school specialist?

COLBERT: I've built several schools, if that is what you mean. But here is the point that I am trying to make. Most architects, when they come into the profession, want to do something to express themselves. They are trying to build a business, a name, a reputation. It is not so much a matter of *getting* the work as *producing* the work. But, as people get older, it seems that they are much more interested in *getting* the work than in *producing* it. You seldom see older architects at a drafting board. They can't afford to draw—they are the ones out making the contacts. Let me turn your question. How would you feel if you went to a famous surgeon to have your appendix removed and found that an assistant was going to do the job? **End**

## Does your school have a suggestion plan?

Here's how Los Angeles has brought its staff into the search for a "better way."

### INDUSTRY BENEFITS, WHY NOT SCHOOLS?

*Benefits of employee suggestion plans, recognized and appreciated by business, industry and government agencies since World War II, can also be enjoyed by schools. The benefits says the National Association of Suggestion Systems, are these:*

- 1. A vast reservoir of useful ideas is tapped. Who knows an employee's job better than the employee?**
- 2. Administrators are stimulated to learn more about the jobs under their jurisdiction and increased worker-supervisor cooperation results.**
- 3. Morale improves as employees discover management welcomes their ideas and provides public recognition for them.**
- 4. Experience shows that employees will submit valuable ideas to reduce costs, through better working conditions and more efficient operations.**

■ ■ ■ The employee suggestion plan, long in use by business, has been adopted by the Los Angeles public school system for the same reasons industrial firms have found it profitable: To improve efficiency and reduce costs.

Los Angeles' school district board approved the plan only last July, so school officials have yet to issue a report of the results, but they are highly optimistic that the plan will be a success. It is believed to be the first district to adopt such a plan.

Patterned after industrial programs, the suggestion system incorporates what the school board believed were the best features of several.

"The plan," explains its supervisor, William J. Hornbeck, "is designed to encourage improvements within existing board and administrative policy, rather than to change the policy."

A fixed schedule of cash awards prevents the program from becoming either an outlet for personal grievances or a complaint department.

Awards for suggestions which are accepted fall into two categories: Those where benefits can be measured in terms of cost, and those in which the resulting improvement is an intangible one, i.e., morale, public relations, operating conditions.

The person who submits the idea receives 10% (up to a maximum of \$1,000) of the amount saved by it during the first year. For intangible benefits, the award ranges from \$10 to \$50 in each category of improvement. Thus, if a suggestion benefits both safety and public relations, and saves money, too, its author would be eligible for awards in all three categories, and could receive as much as \$1100.

Supervisory personnel who assist with the preparation of an idea are given a cash award amounting to 10% of whatever the suggester receives.

This feature is designed to encourage supervisors to work more closely with their subordinates. "It enables them to foster cooperation and improve morale as well as add to their income," explains Hornbeck.

Cash awards are accompanied by a certificate of award.

"These remain," says Hornbeck, "long after the money is gone and serve as a permanent record of the individual's contribution . . ."

Acceptance of suggestions is up to the administrator of the area in which an improvement is proposed. The advantage of this, explains Hornbeck, is that it prevents the suggestion plan committee,

*continued on page 63*

## Cost accounting

continued from page 28

standing of his cafeteria operation. It gives him a clear picture of his over-all solvency. Needless to say, it is an accounting imperative.

All of the individual items found in this sheet are carried forward from the trial balance. The assets listed in the debits column of the trial balance are reflected in the debit column of the balance sheet. The current liabilities listed in the credits column of the trial balance are listed in the credit column. The net ending balance plus the profit or loss shown in the profit and loss statement constitutes the current net ending balance. This is the vital figure. It tells the manager how much fiscal cushion his operation rests on.

It is recommended that a cafeteria operation have on hand enough financial cushion to cover its costs for a typical month's operation.

### The profit and loss statement

The profit and loss statement is designed to give the manager information on how well he has fared over a given period of time. The statement is vital because it is an

indicator of the direction in which his operation has moved during the time measured. When net profit or loss is related to the net ending balance or surplus on the balance sheet, the manager can determine the magnitude and urgency of any adjustments he must make in order to maintain or redirect his operation toward its profit goal.

The profit and loss statement is prepared from data already available in the trial balance. Credits which accrue from sales and from subventions are carried forward from the trial balance to the credit column of the profit and loss statement. Expenses for labor and food are carried forward by school unit from the debit column of the trial balance to the debit column of the profit and loss statement. The figure necessary to balance the two columns is the profit or loss accruing to the enterprise for the period of time measured. If the adjustment figure is necessary in the debit column, a profit has been earned. If it is in the credit column, a loss has been incurred.

This statement is maintained on a year-to-date basis. The profit or loss for the current month is found by subtracting from the current year-to-date figures the totals shown

in the profit and loss statement developed at the end of the previous month.

In addition to information concerning operation during the current month, and year-to-date, the previous month's totals are isolated to further enable management to identify the direction which the cafeteria operation is taking. (This feature is not shown in the illustration since this report is for September, the first school month of the new fiscal year.)

### The unit cost summary

The unit cost summary is vital in that it shows where to make the adjustments in the organization in order to change or maintain its profit position. The information contained in this statement is a most important tool of efficient management, for only with such detailed information can management be discriminating in seeking better practices.

The summary (*see below*) is simple to prepare and yet it separates adequately the major components of the total cost analysis.

The results of the balance sheet tell you whether you need to make major adjustments in your cafeteria operation in order to increase or

## 4. COVINA SCHOOL DISTRICT CAFETERIA ACCOUNT UNIT COST SUMMARY

MONTH OF SEPTEMBER 1957

	#1	#2		#3	#4	#5
School	Lunches Served	Labor Cost Per Plate	"C" Lunches Served*	Plates Served Per Hour of Labor	Food Cost Per Plate	Total Cost Per Plate
Barranca	3,300	.1833	3,870	9.21	.1634	.3467
Ben Lomond	3,067	.1963	5,760	7.97	.1590	.3553
Cortez	4,734	.1683	3,344	10.16	.1880	.3563
Covina	2,689	.1840	5,599	9.51	.1499	.3339
Cypress	3,906	.1526	5,527	10.90	.1681	.3207
Eva D. Edwards	6,736	.1545	3,156	10.60	.1699	.3244
Griswold	2,795	.1711	6,297	10.20	.1799	.3510
Grovecenter	3,265	.1641	4,529	10.29	.1667	.3308
Lark Ellen	2,924	.1724	6,825	9.86	.1590	.3314
Rowland	3,342	.1950	8,213	8.33	.1697	.3647
San Jose	3,541	.1809	3,854	9.32	.1781	.3590
Sunkist	3,080	.2110	5,419	8.34	.2001	.4111
Traweek	8,691	.1238	3,706	12.57	.1827	.3065
Vine	5,687	.1316	3,487	11.58	.1631	.2947
Workman	4,093	.1765	4,821	9.77	.1683	.3448
District	61,850	.1640	74,407	10.10	.1722	.3362

\*Labor Cost Per Plate Includes Cost of Serving "C" Lunch (Milk Only)

decrease profits. The monthly profit and loss statement tells you to what degree your past efforts have been successful. The unit cost summary tells you where you can most profitably expend future efforts to change or maintain the desired direction.

A word of caution is in order at this point. Do not expect more of this summary than it is designed to give. It is a *gross* management tool. It compares various items of performance. It tells you where a problem may exist, but it does not always tell you "why." You must determine the "why" through further investigation. For example, labor costs may be considerably higher in one cafeteria than in another. An immediate conclusion might be drawn that this was due to lack of effort on the part of the unit's labor force. Such might not be the case at all. Physical facilities in one unit may vary markedly from that of another. This fact may be reflected on this unit cost summary.

The age of children served has much to do with how rapidly they

can pass through the serving line. Thus, a junior high is in a better position at the outset to make a profit than is a primary school. This same customer age factor prevails in the serving of "C" lunches. (A "C" lunch is a glass of milk under the national school lunch program.) In this summary (*see chart*) the labor necessary to serve "C" lunches is absorbed in item two. However, "C" lunches are not reflected in items one, three or five. Thus, a school serving a larger number of this type of lunch than the normal will have a higher labor cost even if its "A" lunch procedure is of average efficiency.

The number of lunches served is another important figure. By comparing your volume with your potential customers (student body), you can find your percentage of participation. If this percentage is lower than you think it should be, you must find out why. Needless to say, there can be many causes. A few common ones are double session, lack of an aggressive promotion policy on your part, poorly cooked and served meals, drab menus, unpleasant lunchroom supervision, high prices.

Your labor cost per plate and plates served per hour gives you an idea of the efficiency of your labor force or of the kitchen in which they work.

Food costs per plate can give a clue to both profit and loss. While a reasonable figure is sought here, too small an amount may reflect heavily on your participation. Junior high children, for instance, must be served enough or they will take their business elsewhere. Too much food on the plates results in waste and a loss to the cafeteria.

When these major control points have been developed on a current basis and are properly used, the likelihood of major changes in order to stop a downward slide in profits becomes more remote, for with proper use of these points, the manager can always determine the direction his operation is taking at the end of any month. Minor changes can be made to bring about more efficient operation. The results can help the manager guide his operation through troubled financial waters with security. **End**

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(For more information, see last page)

JUNE 1958



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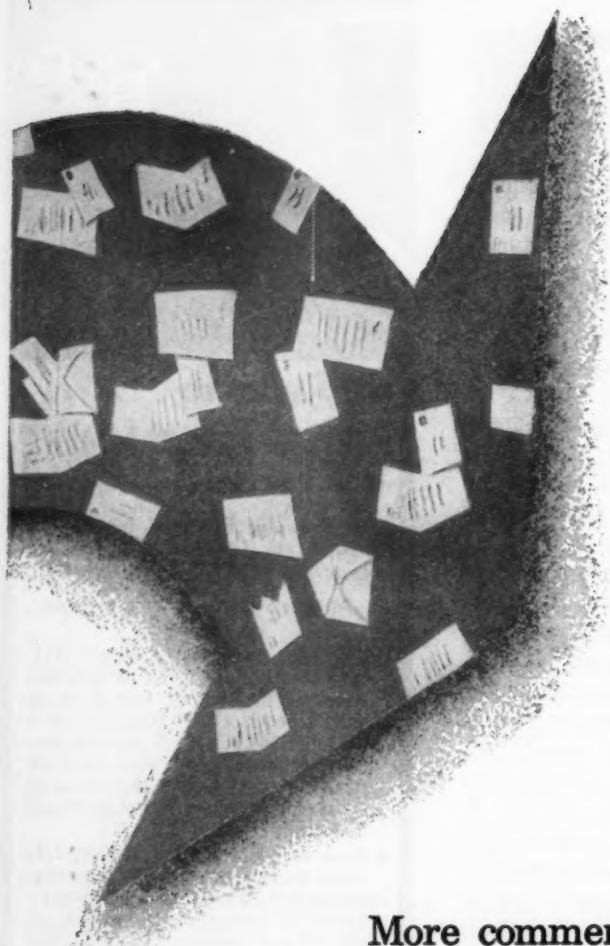
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(For more information, see last page)



Further reactions to the

# WINNETKA REPORT

on teacher salaries

More comments from schoolmen on this important report, plus a statement from Winnetka's own superintendent specially prepared for SCHOOL MANAGEMENT.

■ ■ ■ On April 12, by a margin of better than five to one, the citizens of Winnetka, Ill., adopted the salary schedule suggested in the report of the Winnetka Citizens' Advisory Committee on Teacher Salaries. (*SM*, April, 1958). Below is a statement from Superintendent S. P. Marland, specially prepared for School Management following the voting. We also present here more comments from other schoolmen on the condensation of the report carried in our April issue. Ed.

**"People of Winnetka have firmly endorsed our salary design"**

S. P. MARLAND, JR., *Superintendent Winnetka, Ill.*

"We are, of course, pleased that the people of Winnetka have firmly endorsed our new salary design for

teachers by referendum. The new tax base should permit full implementation of the schedule over the next several years.

"It may be of interest to other school administrators to know that one feature of this schedule to which we gave much attention was the following: It is not our intent to attract large numbers of good teachers from other school systems through dramatic salary advantages. Close scrutiny of the schedule, particularly the beginning salary and the limited number of years of past service which can be recognized, are deliberate features of the design.

"During the past few months of the hiring period the effects of these controls have been evident. A number of teacher candidates have, as we expected, found that they were earning substantially higher salaries

in their present positions than they could immediately in Winnetka. However, the schedule has served, as intended, to attract a number of good teachers whose long-term potential and whose career aspirations are consistent with the long-term implications of this design.

"Most of all, we hope that the new dimensions offered in this schedule will have a favorable influence on teachers' salaries everywhere."

**"Anticipate considerable . . . record-keeping"**

ROY J. WASSON, *Superintendent Colorado Springs, Colo.*

"Perhaps the most challenging single statement made by the special committee which prepared the report is the one which asserts that

'through inadequate compensation the individual teacher bears a much greater share of the cost of educating our children than the taxpayer.'

"I like also the statement of the committee on merit rating in so far as it might be used for salary schedule consideration.

"A concluding speculation, coupled with some experience in a system where a plan similar to the 'initiative' units operated for some years, would anticipate considerable work in credit evaluation as well as record-keeping from this schedule."

#### **"Fringe benefits . . . important part of any schedule"**

K. R. MACCALMAN, *Superintendent Nyack, N. Y.*

"The so called 'fringe' benefits which the citizens' committee proposes, make an important part of any schedule at the present time in attracting and maintaining good personnel. The retirement provision, the social security provision, the Blue Cross or equal provision, the sick leave provisions, and the dependency provisions all will work together to make a more attractive career situation.

"We have been operating with a dependency quota for some time and find it very meaningful, especially in family situations. All of these are benefits which industry has found necessary to maintain a sound staff.

"The salary schedule looks like a sound schedule to attract career personnel with the exception of the fact that it indicates such a long period of time in making its tops become effective. I would raise a critical question on an attempt at the present time to establish a scale with a dating showing that extent of range.

"I cannot help but differ on their opinion, however, that merit rating as such should not be operative in a salary scale. Maybe we mean different things by merit rating. We mean in merit rating an attempt to recognize a superior job and to see that the superior teacher is re-

warded for the superior job. This theory certainly holds true in business, in the professions, and I would venture a guess that the superior teachers of any large teaching group would vote in favor of such consideration. The very elements of a lockstep salary schedule would seem to mitigate against holding the outstanding teacher on a staff."

#### **"Position on merit rating a tenable one"**

IRA JARRELL, *Superintendent Atlanta, Ga.*

"The position taken on the merit system is a tenable one, it being generally conceded that there is no objective criteria for measuring teacher competency. Merit awards are ideal if it is possible to administer them fairly."

#### **"In reality they are approving merit rating"**

FORBES H. NORRIS, *Dist. Principal Briarcliff Manor, N. Y.*

"I think their approach is very safe and sound and really starts looking at a teacher as a full time, year round employed professional person.

"I was interested in their approach to the merit idea. While they seem to disagree, they are, in reality, approving it because they hope to have such attractive working conditions in Winnetka that they would draw high caliber people. In other words, their merit idea would be at work during the screening process and before a teacher goes on tenure. That is one of the phases of merit rating that has not been discussed too much.

"I think the recognition they give for professional improvement such as work, experience, travel and independent study are very good.

"The program set up by Winnetka, in my opinion, will have a very fair chance of success in any relatively small school system. I would imagine the difficulties would increase when and where school systems count their teachers by the hundreds or thousands."

#### **"Eliminating tenure . . . would be a forward step"**

OTTO C. JAEGER, *Member Bd. of Education, White Plains, N.Y.*

"I was particularly impressed with the objective of providing an attractive, long range plan of compensation rather than one which called for a higher starting salary merely to attract teachers in the first instance.

"Probably the matter of tenure is not involved in the study covered by the report. If, however, the absence of any mention of tenure implies (which I doubt) any move in the direction of eliminating tenure I think it would be a forward step with respect to one of the most troublesome phases of teacher employment.

"The provision for conditioning progress from the lowest to the highest step in each column upon satisfactory performance, should tend to improve quality of teachers if appraisals are in fact made and teachers are aware that they will be made. When salary advances are automatic and taken for granted, quality can suffer in the education field as well as in private business.

"No mention is made of placing schools or teachers on an 11 months' basis. If such were done, the public might feel less opposition to increased salaries for teachers and might have fewer misapprehensions as to how much teachers are able to earn in total each year by reason of supplemental employment in after-school hours or long vacation periods."

#### **"Report assumes inspirational proportions"**

RICHARD VANHOOSE, *Superintendent Jefferson County, Ky.*

"This report assumes inspirational proportions when one considers the gamut of criticism and cynicism that the teaching profession has experienced the past several years. It is my fervent hope that lay groups across the nation will rise in this crisis and direct their constructive talents toward the solution of this and other educational problems. **End**

*A monthly review of ideas, new products and helpful hints*

### ▶ Parents upgrade school standards

Parents in Dade County, Fla., an area that includes Miami, Miami Beach, Coral Gables and two dozen other cities, have brought about a radical improvement in the education standards of their schools. Deluged by complaints about the schools, the school board held a series of town hall meetings to find out just what it was parents wanted and, effective immediately, instituted these changes:

1. Students will be promoted only if their academic achievements justify it.

2. An additional year of English and mathematics will be required for graduation from high school.

3. Physical education requirements will be cut by one year.

4. Courses in "family living" will be abolished.

5. Students who do not study, and who hinder efforts of other students, will be dropped from school.

The board said it expected both students and their parents to accept a greater share of the responsibility for maintaining the new standards which, it hoped, would bring greater prestige to academic learning.

### Raise Prices

*A school board trustee in Levittown, N. Y. has suggested that the price of school lunches be increased as a means to raise teacher salaries. Trustee Salvatore Gangi made the suggestion at a budget hearing after protesting the budget provided "insufficient increases" in teacher salaries.*

### ▶ Interscholastic athletics help curb delinquency

The ban on delinquent boys taking part in interscholastic athletics may be modified in the state of Iowa, according to an official of the Iowa High School Athletic Association. Lyle Quinn, IHSAA executive secretary, says many school administrators are changing their minds about this

long-standing rule that removes boys who are on probation from the team.

Although they still feel, he said, that the representative of a school, even in athletics, should be generally above reproach, there is no reason why the boy on probation cannot take part in practice games and team work sessions. While it is true, Quinn said, that athletics have not kept all boys from becoming delinquents, the fear of their being dropped from the teams has been a deterrent. Quinn said he believed that if interscholastic athletics were abolished, "the juvenile delinquency graph would skyrocket."

### ▶ "Off-street parking" for slow students urged

Schools should be allowed to concentrate their scarce teaching talent on students who show the most promise, and should provide something tantamount to "off-street parking" for the rest.

This is the suggestion of Dr. John F. Gummere, headmaster of the William Penn Charter School in Philadelphia.

Dr. Gummere said compulsory education should be modified so "youngsters will not be forced into school when they are incapable of receiving further education." He admitted "something" must be done for the "ineducable" but proposed we "call it off-street parking, or something which actually describes it."

### ▶ Non-teaching jobs still plague teachers

Teachers attending the Alabama Education Assn. convention in Birmingham joined their colleagues in other states protesting the burdens of non-teaching chores. A survey among delegates to the conference showed that Alabama teachers, by a two-to-one majority, feel they have too many extra duties that have nothing to do with instruction.

Duties the teachers said they were required to perform include: Collect money for charity drives, load school buses, attend civic meetings, visit homes of students, collect insurance

premiums, collect lunch and theater money, collect yearbook funds, make lunchroom reports, do janitorial work, and an assortment of clerical jobs.

On top of this, they complained, they still stayed up until midnight grading papers and had no time for themselves or for classroom planning.

A few said they didn't mind doing extra jobs, although it infringed on teaching time, if they were paid adequately.

### Fast School

*The Marin County Day School, Corte-Madera, Calif., a private institution in this San Francisco suburb, has completed one of the fastest construction jobs on record. A seven-classroom school was occupied by 140 students just 50 days after trustees had voted to build. It is constructed of pre-fabricated steel sections.*

### ▶ Device lets students grade their own exams

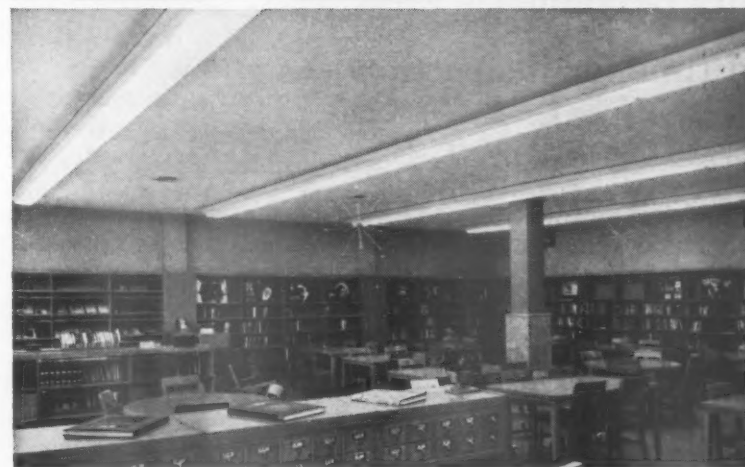
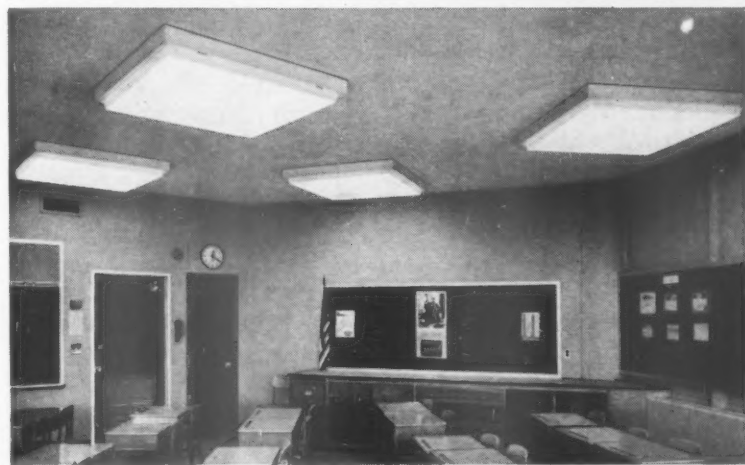
A gadget developed by Dr. Clarence F. Willey, professor of psychology and education at Vermont's Norwich University, enables students to grade their own exams as soon as they have finished taking them.

Willey believes the device is especially valuable because it stimulates a student's interest by giving him immediate knowledge of the results of his efforts. Nobody would be much interested in sports, says Willey, if they had to wait a week to find out who won.

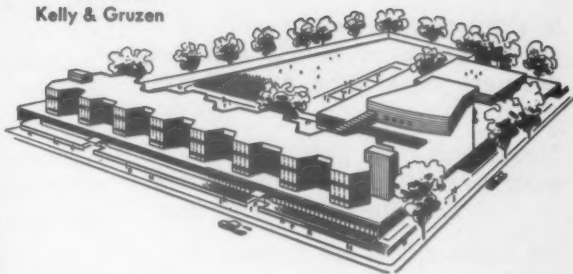
This is how the self-scorer works.

Answers to multiple-choice questions are marked by the student in indelible ink. The exam is given to the instructor who makes certain the answers are firmly marked. Then the exam paper is punched by the gadget to mark the correct answers and returned to the student who computes his own score.

One further advantage: It saves hours of teacher time.



Clinton Place  
Junior High School,  
Newark, N.J.  
Architects:  
Kelly & Gruzen



# READING, WRITING AND Plexiglas LIGHTING

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(For more information, see last page)



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# How to ease the load on your teaching staff

Houston faculty recommends ways  
to save school time for instruction

■ ■ ■ There's plenty of talk these days about how to bring more people into the teaching profession, but little has been said about increasing the capacity of our present teachers to teach by cutting their non-teaching duties.

Recently a committee of teachers in Houston, Texas, set out to study what non-teaching duties were taking up most of their time, with an eye to finding a way to cut or eliminate them.

The committee started by dividing non-teaching responsibilities into four groups:

1. those which consume the homeroom period;
2. those which infringe upon class time;
3. supervisory duties involving extra-curricular activities;
4. professional duties requiring time beyond the school day.

The committee then surveyed junior and senior high school teachers throughout the system, person-

ally and through questionnaires, to determine the various responsibilities in each category.

Of the many jobs that take up valuable time both during class and after school, the teachers listed record keeping as the main offender. A modern, well-operated school system generally requires myriad reports, the teachers acknowledged. In the Houston system some reports must be made out in octuplicate—eight sets of program cards, for example.

## Modern methods sought

The teachers recommended that more modern methods be adopted, in line with the practice of other major businesses. Since administration in a school district is akin to administration in a large office, store or factory, they urged that such business aides as modern computing machines be put into action to relieve teachers of many hours of routine office work.

Among the many other time-consuming non-teaching tasks listed by the teachers were checking and filing excuses, contacting parents on absences and discipline problems, handling vote tabulation for student elections—as many as eight times per term—attending inter-scholastic and intra-mural games “to help boost morale,” getting the license numbers of cars driven by students, selling the school year-book, measuring seniors for caps and gowns and taking bus duty for football games.

The report showed that teachers in one high school were averaging 136 hours of extra-curricular activities a year, while in another 62 hours was average. And some specialists, such as art teachers, were giving as much as 300 hours a year to extra-curricular activities.

## Rotation urged

“Extra-curricular activities are a definite part of a teacher's pro-

fessional responsibilities," the instructors admitted, "but they should be rotated among the teachers."

Following their survey the teachers made a series of recommendations, based on what they had found to be the main problem areas, to increase the amount of instruction time for each teacher. Among these recommendations were the following:

#### **Homeroom**

1. A study should be made to determine the advisability of establishing a central organization for the keeping of all attendance records and the compiling of six-week reports. It is the feeling of the committee that, with the availability of modern computing machines, a method of pupil-accounting could be devised which would relieve teachers of many hours of routine work.

2. Clerical help should be provided in each school to relieve teachers of much of the record-keeping now required.

3. All announcements made over the public address system should be made only at the beginning of the homeroom period except in case of emergency.

4. Charity drives should be limited to the United Fund.

5. Students should not be in attendance on the last day of each semester. The committee feels that it is essential for the homeroom teacher to have these two days for the completion of semester records.

#### **Classrooms**

1. Only a minimum of interruptions of class time should be caused by announcements, messages from one department to another and requests that students be excused from portions of the class period.

2. Students should never be taken out of class unless it is absolutely necessary. When it becomes necessary to use a student from another class, advance arrangements should be made with the

teacher of that class with the approval of the principal, assistant principal, or dean.

3. Appropriate time limitations should be set up for all groups taking part in tournaments on school time.

#### **Extra-Curricular**

1. Teachers should consider extra-curricular activities a part of their professional responsibilities.

2. The extra-curricular activities should be recognized as valuable in helping boys and girls develop into well-rounded individuals.

3. Responsibilities concerning extra-curricular activities should be rotated among all the teachers within a school wherever possible.

### **School suggestion plan**

*continued from page 55*

which ultimately decides awards, from foisting impractical ideas on operating personnel.

#### **Reason for rejecting**

If an administrator rejects an idea, however, he is required to give his reasons in writing. This report is given to the person who made the suggestion after the committee has reviewed it.

Operation of the plan is administered by Hornbeck who is responsible only to the deputy superintendent of schools, an arrangement the school board believed would insure fair and intrinsic appraisals of every idea.

To simplify the idea processing, personnel are asked to mail suggestions and no "suggestion boxes" are provided. Although a person who submits an idea may request that his name be withheld, this is discouraged. But even anonymous appraisals.

This is how the plan operates:

All suggestions are screened by the suggestion plan office to make certain they do not duplicate previous suggestions. The division head's office reviews them and they go back to the plan office which sub-

#### **Professional**

1. A calendar of weeks especially observed, such as American Education Week and National Book Week, should be posted in order that general and special meetings do not conflict.

2. No general or departmental meetings should be called in the first or sixth week of any six-week period.

3. PTA night meetings should not be mandatory for teachers more than once in a month.

In general, the report called not for less responsibility for teachers, but for more time in which to carry out their main responsibility—educating the students. **End**

mits them to the suggestion plan committee for adoption or rejection. Payment of awards is subject to approval by the school board.

#### **Salary suggestions taboo**

Although suggestions on any area of operation are encouraged from all members of the school staff, both academic and administrative, the plan imposes two practical limitations:

1) Members of the school system's divisions heads council, and members of the staff created to handle the program are not eligible to take part in it. However, this eliminates only 35 employees out of an estimated 35,000 so the plan is virtually all-inclusive, a requirement for success.

2) Suggestions in matters of job classification or salary, and the professional use of classroom materials, are taboo. Job and salary issues can be handled through existing channels, and the board felt that teaching methods or educational philosophy were more properly a matter for teacher training. elimination or creation of jobs, they can suggest creation or elimination of operations. **End**

# MINNESOTA LOOKS FOR A WAY TO



Longer school days and longer school years are being proposed by schoolmen looking for ways to step-up instructional time. Here are some of the experiments and ideas that Minnesota has in the hopper.

By RICHARD P. KLEEMAN

■ ■ ■ "There just aren't enough hours in the day or days in the school year to teach our students all they should learn before they leave school."

This is a simple statement of a problem that schoolmen have recognized for many years. But until the launching of Russia's Sputnik, the public demonstrated comparatively little interest in the teaching going on in the schools.

Now attention has been focused rather sharply on some of the shortcomings in many of our schools and schoolmen are being called upon to rectify them.

One of the first solutions proposed has been more time in which to teach. The major question is: where should this time come from?

## Differing views

The four-quarter all-year school (*SM*, Sept., 1957) has been proposed in some areas as a cure-all for school problems. But most systems that have investigated this idea fully have found shortcomings that make it unworkable over any period of time.

In Minnesota, a state education department research study describes various ways of extending the school year. The report rejects the four-quarter plan on the basis of added expense and administrative difficulty, stating "In view of the great number of disadvantages . . . the four-quarter plan should be considered only as a temporary expedient which might be used in large school systems."

*Richard P. Kleeman is the education editor of the Minneapolis Tribune. He is the 1957 winner of the Education Writers Association plaque for "outstanding work of interpreting education by a newspaper."*

The report then goes on to examine briefly the idea of voluntary summer schools and the Rochester 12-month contract plan for teachers (*SM*, Nov.-Dec., 1957). The latter is acknowledged to have a number of important advantages but the report points out that it "obviously will cost more." (Under the Rochester plan, teachers sign a 12-month contract. They teach a regular school year, then take a single month of vacation. During the rest of the summer they teach in special classes, take recreation groups, undertake enrichment study or travel or engage in other activities of benefit to the schools.)

## Lengthened school year

The final plan discussed in the report is lengthening the school year—from the present nine months to 10½ months. "Among many educators," the report states, "there is increased sentiment for a longer compulsory school year." The report suggests a 210-day year, rather than the state's present minimum of 170 teaching days.

The report acknowledges that this plan would cut severely into summer vacations but, it states, "unfortunately, vacation time is not generally used for . . . desirable purposes . . . It is quite possible that vacation time would be used more discriminatingly if vacations were shorter."

Arguments for the 210-day year do not rest primarily on an economic factor, the report points out. Rather they are based on young people's mounting need for education and a need for maximum development of human resources.

The report concludes: "A nine-month school year

is too short and a 12-month term is too long. A 10½ month school year could be adopted with a minimum of difficulty."

### Lengthened school day

Even as this report was being considered, several Minnesota school systems were launching their own experiments in efforts to gain more instructional time.

One solution proposed by many of these districts is a longer school day. In Roseville, for example, Superintendent Emmet Williams reports, a seven-period day is in effect with school open from 8 a.m. to 3:40 p.m. for junior and senior high school pupils. This time includes periods set aside for athletics and extra-curricular activities.

Superintendent Beverly Hill of Albert Lea, reports that his district will turn to six 60-minute periods for junior and senior high school students next year. Altogether the day will run six-and-one-half hours with five minutes allowed between each class period. An alternate seven-period day will allow for such interruptions as assemblies and other mass school activities. Six of the periods will contain 53 minutes and the seventh will run 40.

### Problems anticipated

Superintendent Hill acknowledged four major deterrents to a lengthened school day. He pointed out that rural students may have to leave home too early or return home too late. "Too long a day for rural students, especially those in the elementary grades, might result," he said. The Albert Lea district elementary day will be increased, in grades three through six, to six hours next year.

Teacher objections to a longer day were also recognized. Said Superintendent Hill: "Teachers resist a longer school day . . . In the case of real fatigue, their complaint is justified."

He also saw a potential economic problem since "most schools require teachers to teach five of six periods. In a seven period-day, unless they teach six, you have greatly increased costs. More teachers are required for extra subjects and activities."

And, finally, "Unless you can actually get all activities into the day, which I don't believe you can unless you have unusually fine facilities, you may increase your problems for activities."

Superintendent Hill said that his district is now considering ways in which to extend still further the learning opportunities for his students.

Among the steps under study are:

Scheduling of a seventh period after school, especially for gifted students.

Offering some courses, such as typewriting, in the evening.

Summer school instruction.

No final conclusions on a state-wide or local basis have been made by the Minnesota schoolmen involved but general agreement has been found on two points:

1) The total time available for teaching during the school year should be increased.

2) Leadership from the state would help local schoolmen in their efforts to provide a program of increased instructional time.

**End**

## What's happening in YOUR district?

Our best editorial material comes directly from people like you, people who are actually confronted with problems of school management and are finding ways to solve them.

If your district has found a good solution to a problem in school management, or if you have a problem and need help finding a solution, let us hear from you. We endeavor to return any unused manuscripts.

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(For more information, see last page)

## PRESS RELEASES

*News from the business firms serving your schools*

### Three complete lines of classroom furniture offered

Schoolco, Inc., a division of Configured Tube Products Co., has entered the school furniture field on a national basis. The firm's line will feature three series of furniture to meet all budget requirements: the basic "400" series, the medium-range "500," and the premium quality "600."

Because of expanded facilities, the manufacturer promises fast delivery on all orders. Offered are single-arm desk chairs, separate chairs, separate desks, all-purpose tables and teacher's desks.

For more information about these products, circle number 779 on the Reader Service Card.

■ ■ ■

### 12-Inch relief globe for social studies

An inexpensive vinyl plastic relief globe has been introduced by Geo-Physical Maps, Inc. The white surface of the globe is free of any printing or color. The latitude and longitude grid is embossed, with degrees of longitude clearly indicated on the equator rim.

The globe's surface is treated to take self-sticking tapes and detailed painting with inexpensive poster paints. The globe is washable or can be sprayed with plastic for permanent display.

The 12-inch Geo-Physical globe is delivered in two nested hemispheres with stand, teacher's guide and a natural-color map.

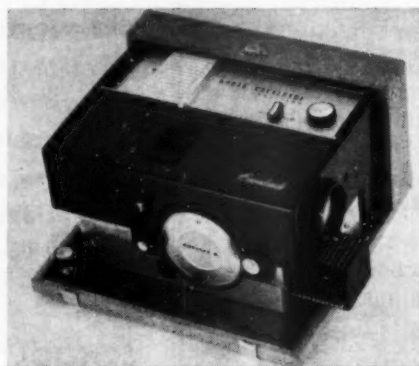
For more information about this product, circle number 780 on the Reader Service Card.

■ ■ ■

### Automatic slide projector for classroom instruction

The Eastman Kodak Co. has designed this slide projector specifically for classroom use. A completely automatic unit, it has a choice of three methods of advancing slides and comes complete with a 40-compartment magazine in which slides are fully protected by metal frames before, during and after projection. A movable pointer is incorporated in the Kodak "Cavalcade" unit. The projector also has a five-inch f/2.8 lens and brightness selector. Slides may be

edited without removing the magazine from the projector because they are kept in an upright position. Warm



air is drawn over the slides to prevent breaking and cracking.

For more information on this product, circle number 785 on the Reader Service Card.

■ ■ ■

### Calendar available for school officials

A calendar for the school year September, 1958 through June, 1959 has been made available to all school officials free of charge by the Master Lock Co. Ample space is provided after each date for listing important events. Printed in two colors, the calendar measures 18½ by 24¼ inches.

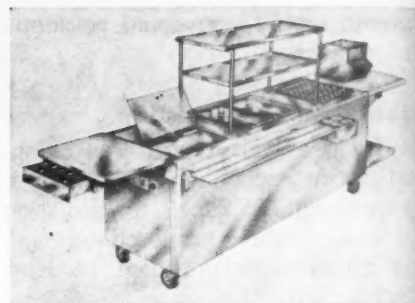
For a free calendar for your school, circle number 788 on the Reader Service Card.

■ ■ ■

### Portable cafeteria for multi-purpose rooms

A new portable food service unit called the "Speed-A-Teria" has been developed by the Lincoln Manufacturing Co. This portable cafeteria will feed up to 250 people quickly and easily.

The Speed-A-Teria, when stored and locked, is eight ft. long and opens into a complete cafeteria 13 ft. long. It combines an elevator-type refrigerated storage for milk and other beverages, a zero degree ice cream compartment, two hot food units, dish storage, silver dispensers, tray dispenser, folding tray slide, cash drawer and many other desirable features. All



are designed into a compact portable unit that can be wheeled by one person.

Another handy feature of the Speed-A-Teria is that it needs no drain and operates on a single 110-volt outlet.

For more information, circle number 797 on the Reader Service Card.

■ ■ ■

### Bus driver's safety stressed

The new 1958 line of Oneida Warrior school coaches offers a series of selected innovations that stress driver safety, comfort and convenience.

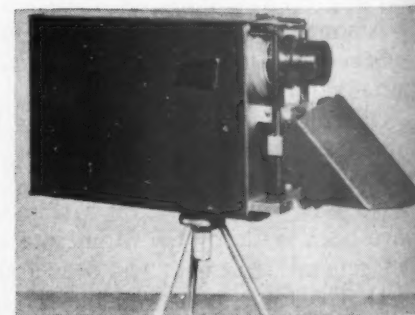
Engineers for the Oneida products division of Henney Motors, Inc. have developed these aids for the nation's school bus drivers: 1) Crash rails that wrap around the body front for collision safety. 2) A personalized cabinet and a rack at the driver's left. 3) A redesigned instrument panel for immediate identification and finger-tip controls. 4) Added ventilation through air scoops and swing windows. 5) A form-fitting foam-rubber-filled driver's seat.

For more information, circle number 799 on the Reader Service Card.

■ ■ ■

### Miniature TV camera prevents light damage

The Dage Television Division of Thompson Products, Inc., has devel-



oped an all-transistor miniature TV camera. This new camera, said to be the world's smallest, weighs approximately four pounds and is slightly

larger than a paper-back book. Of broadcast quality, the camera features printed circuits and modular components.

This new TV camera also has an electronic and automatic light level compensator that is said to prevent light damage to the vidicon tube.

For more information on this product, circle number 786 on the Reader Service Card.

■ ■ ■

### Correct posture chair for students

An easily adjustable posture chair for typing classrooms or the laboratory, manufactured by the Toledo Metal Furniture Co., is said to assist in correct posture training in the classroom. This chair is available with two-inch hard rubber ball bearing casters or ball and socket swivel glides. Adjustments can be made to meet individual requirements. The self-conforming backrest is easily adjustable while the student is seated in the chair.

For more information on this product, circle number 784 on the Reader Service Card.

### New wardrobe features dual-purpose convenience

Mobile, all-steel and roomy, the new Grade-Aid students' wardrobe, a product of the School Equipment Manufacturing Corp., is designed to provide ample space for hats, coats and boots. In addition to its use as a students' wardrobe, the unit has a unique back construction that incorporates a tack-board project panel for full-time classroom use.

Mounted on rubber casters, the wardrobe has two adjustable shelves—one for hats and one for overshoes, rubbers, etc. It also features a removable drip-pan.

For more information, circle number 795 on the Reader Service Card:

■ ■ ■

### Battery powered floor machine runs six hours

This combination scrubber-polisher and vacuum is manufactured by the Clarke Sanding Machine Co. It is self-propelled and has a forward speed of 155 lineal feet per minute. Heavy duty batteries will operate the

machine for approximately six hours of continuous running and the unit is furnished with an automatic battery charger.

For more information on this product, circle number 782 on the Reader Service Card.

■ ■ ■

### Low-cost adding machine suitable for schools

A 10-key, hand-operated adding machine has been developed by the Monroe Calculating Machine Co. This low-cost machine weighs only 14 pounds. Minus items and negative



totals and sub-totals print in red. The machine has standard-size keyboard.

For more information on this product, circle number 783 on the Reader Service Card.

■ ■ ■

### Portable phonograph for audio instruction

A four-speed portable phonograph suitable for classroom use has been marketed by Stromberg-Carlson. This new machine weighs only 26½ pounds. Two wide-range speakers together with a ceramic cartridge and cross-over network provide a frequency response of 40 to 16,000 cps.



The peak power output of the amplifier is 10.7 watts without distortion. A speaker switch provides for selection and use of speakers within the phonograph, external speakers or both simultaneously.

For more information on this product, circle number 787 on the Reader Service Card.

## Literature Available FROM MANUFACTURERS

**Teaching:** "Arithmetic Minus Mystery Equals Understanding," a 16-page booklet offered by the Monroe Calculating Machine Company, presents a new method for teaching arithmetic to children with a calculating machine.

For a free copy of this booklet, circle number 789 on the Reader Service Card.

**Bleachers:** A 12-page catalog, published by Berlin Chapman Company, illustrates and describes a wide variety of folding seats, backstops, grandstands, and bleachers.

For a free copy of this catalog, circle number 796 on the Reader Service Card.

**Lighting:** An eight-page bulletin, "Sportslighting For Night Football," published by the Crouse-Hinds Co. gives detailed plans and specifications for installing athletic field lights.

For a free copy of this bulletin, circle number 794 on the Reader Service Card.

**Moveable equipment:** A six-page folder, "School Equipment," published by the Colson Equipment & Supply Co., describes a complete line of moveable school equipment.

For a free copy of this folder, circle number 793 on the Reader Service Card.

**Acoustical Ceilings:** A 12-page brochure, "Ceiling Design Opportunities With Acousti-Lux Panels", illustrates several different types of ceiling installations.

For a free copy of this brochure circle number 798 on the Reader Service Card.

**Seating:** "How to Provide Lower Cost School Seating," a six-page folder released by the Clarin Manufacturing Co., describes the use of folding chairs for multi-purpose areas.

For a free copy of this folder circle number 792 on the Reader Service Card.

**Shop Projects:** A 20-page catalog, "School Shop Projects," published by the Kastaline Co., describes semi-finished kits for metal working shop classes.

For a free copy of this catalog, circle number 790 on the Reader Service Card.

**Shelving:** An eight-page, two-color booklet, "Steel Shelving," published by the Penco Metal Products Division of Alan Wood Steel Co., gives details of their complete line of storage cabinets and shelves.

For a free copy of this booklet, circle number 791 on the Reader Service Card.

**S/M**

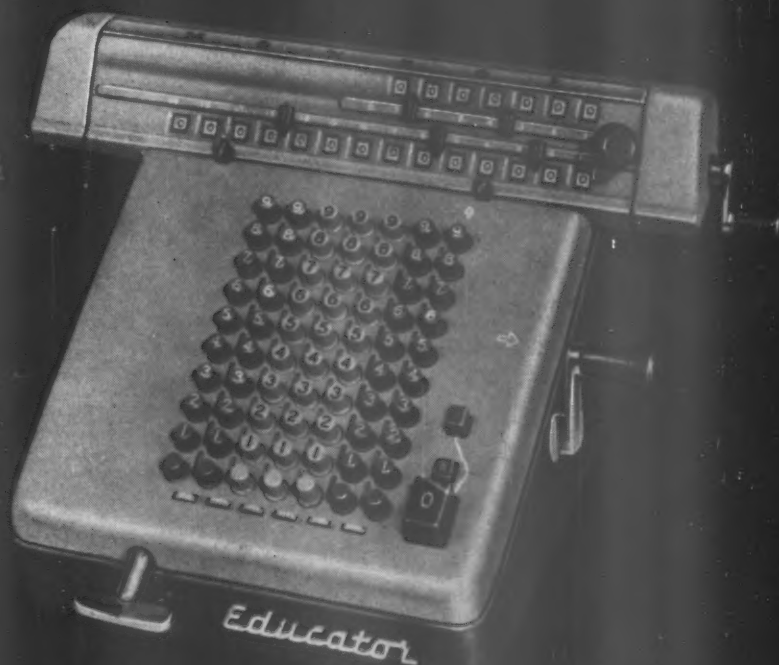
This Reader Service Section is provided to help you obtain additional information on advertisements in this issue. Simply find the appropriate key numbers in the listing and circle the corresponding numbers on one of the cards bound in behind this page.

# FREE READER SERVICE SECTION

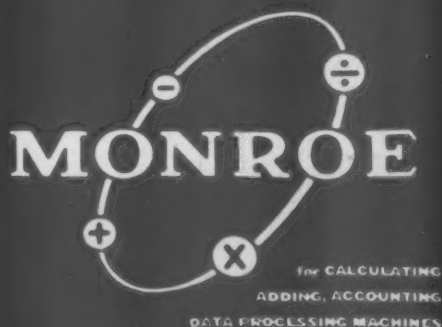
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**For today's crisis in Science**  
**...an *ADVANCED***  
**method of teaching arithmetic**



Why do so many children dislike arithmetic? Why is it that many really good students depart from school ill-equipped to meet the demands of our scientific society? Considering questions such as these, the Monroe Calculating Machine Company has developed a new, advanced approach to the teaching of arithmetic. Based on the studies of Dr. Howard F. Fehr, Head of the Department of Teaching of Mathematics, Teachers' College, Columbia University, the techniques involve the use of classroom calculators. Results have shown that calculator-assisted classes are more proficient, comprehend more and, perhaps most important of all, enjoy arithmetic more. The nature and philosophy of calculator teaching are clearly stated in Monroe's new booklet: "Arithmetic Minus Mystery Equals Understanding." For a competent understanding of the problems of arithmetic teaching, send for your free copy today: Educational Department, Monroe Calculating Machine Company, Orange, New Jersey.



(For more information, see preceding page)



**WELDWOOD BIRCH PANELING** for walls and built-ins and Weldwood Chalkboard (right). Westover Elementary School, Stamford, Conn. Architect: William F. R. Ballard.

## How wood paneling makes schools brighter— keeps the tax load lighter

In schools like Stamford's Westover Elementary (above) learning comes a little more pleasantly for the youngsters these days. Yet the taxpayers will save money. Here's why.

The school's planners used Weldwood real wood paneling on walls and built-ins. The reasons: 1. Weldwood Paneling cheers up any room. 2. It pays for itself by keeping maintenance costs low. Smudges and stains are easily removed and there's no need for periodic repainting and repapering.

Weldwood Paneling, in types to meet virtually every decorating plan, is guaranteed for the life of the building. Like Weldwood Chalkboard and Kalistron wall covering (see below) it can bring long-range savings to your school building or remodeling plans.

**WELDWOOD FIRE DOORS** with African Mahogany faces, in the Slosberg Music Center, Brandeis University, Waltham, Mass., stop transmission of destructive, suffocating heat as well as fire itself. Doors are guaranteed never to warp, twist, or get out of line, thanks to inert, incombustible Weldrok® mineral core. Architects: Harrison & Abramovitz.

**CONCERNED WITH SCHOOL CONSTRUCTION?** We will be glad to have a Weldwood Representative consult with you or your architect—at no charge. And for free informative idea booklet, "Weldwood Products for School Construction and Remodeling," write: United States Plywood Corporation, Dept. SM-6-58, 55 W. 44th St., N. Y. 36, N. Y.



# Weldwood®

**PANELING • CHALKBOARD • KALISTRON • DOORS**  
**UNITED STATES PLYWOOD CORPORATION**

*In Canada: Weldwood Plywood, Ltd.*

**THESE COLORFUL WALLS** of scuffproof Weldwood Kalistron® in the Central School, Hudson Falls, N.Y., never need painting. Color fused to the underside of a transparent vinyl sheet is protected from scratches and smudges. Cleans easily. Comes in 35 colors and different textures. Architects: Sargent, Webster, Crenshaw & Folley, Syracuse, N. Y.

